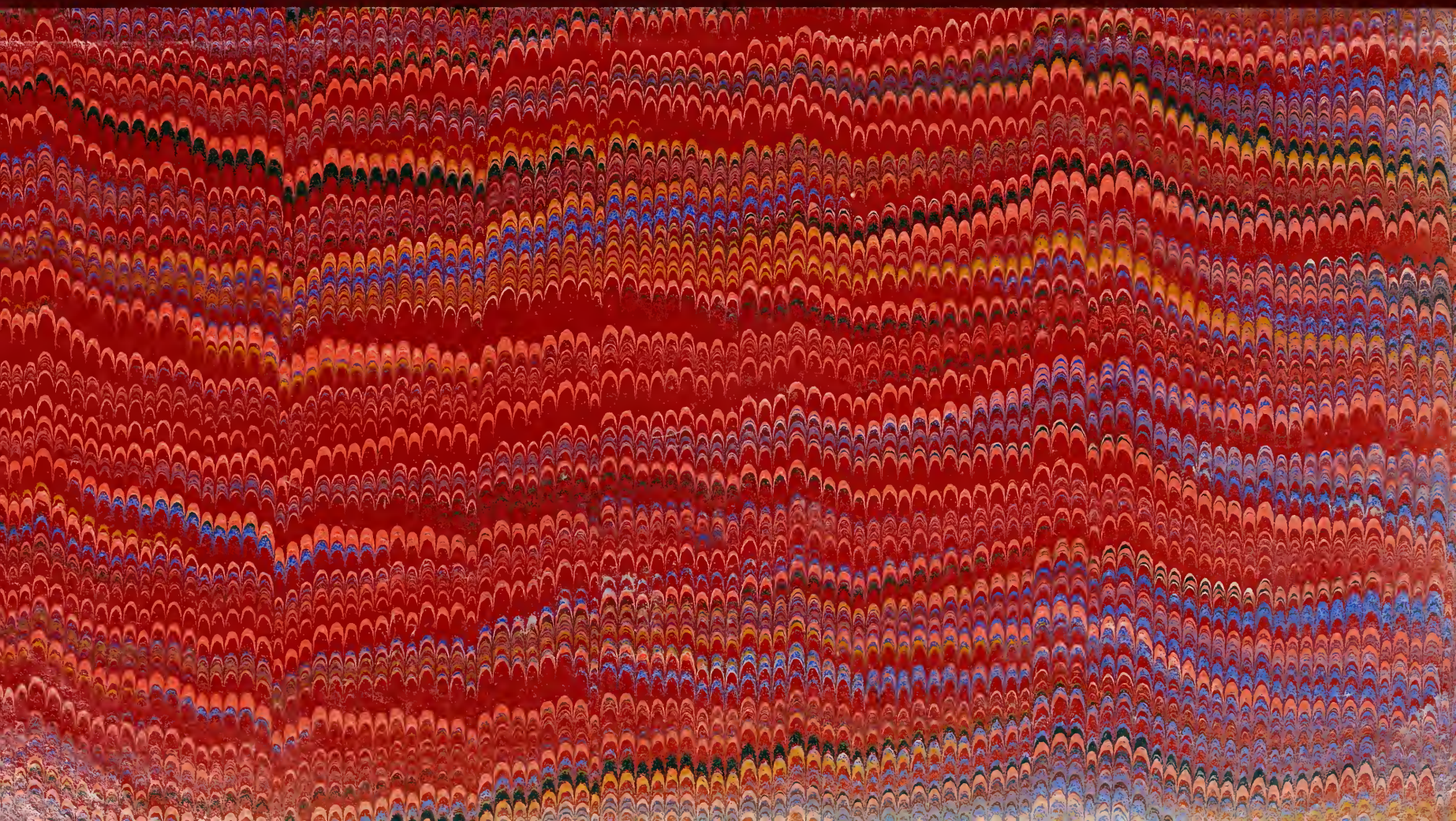

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MEMOIRS

ON THE

COLEOPTERA

BY

THOS. L. CASEY

II

1911

PUBLISHED BY
THE NEW ERA PRINTING COMPANY
LANCASTER, PA.

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I—NEW AMERICAN SPECIES OF ALEOCHARINÆ AND MYLLÆNINÆ.

Since publishing the last paper on new Myrmedoniids (Mem. Col., I), I have carefully arranged all the Aleocharinæ in my collection and find many undescribed forms; these are defined in the present paper. The material in my collection has been obtained from many sources. That most expert of collectors Herbert H. Smith, contributed a very large set of admirably perfect specimens in all parts of the series, from the Catskill Mountains, and Prof. H. F. Wickham and Rev. J. H. Keen have also sent me very full sets, the former from various parts of the Rocky Mountain system and Iowa, the latter from Metlakatla and Queen Charlotte Islands, British Columbia. In addition, Mr. H. C. Fall many years ago, gave numerous well mounted examples from southern California, and others were sent me by Emil Brendel from Iowa, Norman Criddle from Manitoba, C. F. Baker from California and Chas. Dury from Cincinnati; these were augmented by occasional species from numerous other collectors forming a goodly number in the aggregate. Finally, I have myself collected them with assiduity during the past quarter century in California, Texas and parts adjacent, St. Louis, Vicksburg, maritime Virginia, in Rhode Island and elsewhere, so that the material at hand can well be imagined to be tolerably full. The present paper completes the description of virtually all the species known to me from these sources.

Including those now published for the first time and allowing liberally for possible synonymy, there have been certainly many more than a thousand Aleocharinid species described from nearctic North America, and I am firmly convinced that this number represents less than a third of those inhabiting these vast regions, so topographically and climatically varied. There are very few identical with any occurring in the palæarctic regions, though many that are obviously more or less closely allied therewith and confused with them through haste or lack of discernment; and there are equally few common to the Atlantic and Pacific regions of

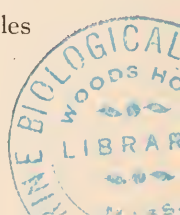
North America, this continent being comparable with entire Eurasia in its evolutionizing influence so to speak. On looking over my previous paper, devoted wholly to a part of the large tribe Myrmedoniini, it can be observed readily how little the faunas of the two coasts have to do with one another. Taking only large genera or subgenera for example, it will be seen that such groups as *Stethusa*, *Micrearota*, *Hilara*, *Noverota* and *Pancota* (*Dolosota*), each comprising numerous species, are confined to the Atlantic regions, not crossing the Rocky Mountain system, while the similarly large groups *Homalotusa*, *Anepsiota*, *Nemota*, *Microdota* as there considered, *Adota*, *Tarphiota* and *Dimetrota*, are confined to the west coast regions, the last however not quite entirely, though the eastern forms are subgenerically different from the more normal west coast *Dimetrota*, and the first extends eastward to the great lakes. This latter distribution is, however, very frequent in the case of west coast genera, many of them extending eastward nearly or perhaps entirely across the continent in far northern latitudes, but having very little tendency to spread eastwardly in the more southern regions; well known instances are *Buprestis* of the *langi* type, *Phellopsis* and many others in nearly all the large families.

The average collector having before him a large assortment of Aleocharinids, generally regards the task of arranging them, even generically, as well-nigh hopeless, and in fact it is rather hopeless unless a great deal of close and careful study be bestowed upon them. Experience under these conditions will gradually render the subject clearer. The procedure that I would recommend is as follows: First mount the specimens, which in the moist and pliable state have been cleaned and straightened, neatly on card points so that the plane of the upper surface shall be horizontal, by the hind part of the metasternum and base of the abdomen, using very little of some strong and quickly setting soluble cement. On inverting the specimen so mounted under an objective of low power—a hand lens is useless as a rule for work in this subfamily except for superficial comparisons,—the legs may be bent aside by means of a fine needle or pin-point so as to expose the mesosternal region. Having the specimens in correct form for study, the first point to observe is the number of joints composing the tarsi, and this is the most difficult of all, the peculiar arrangement of

the setæ frequently giving an appearance of a joint before the last that may not exist, so that mistakes are liable to occur until, or even after, experience may have indicated, through certain peculiarities of habitus, the proper tribal group in cases of uncertainty in the count.

Having determined in this way the tribe to which the species belongs, the next character to observe will depend in general upon the tribe. If one of the Aleocharini, having all the tarsi 5-jointed, attention should first be given to the maxillary palpi; if the fourth joint has a terminal appendage the species is to be assigned to *Aleochara* or some allied genus; if there is no appendage the hind tarsi will generally show whether the species is allied to *Ocalea* or *Thiasophila*, or is an *Oxypoda*, the first joint of the posterior tarsi being long in the latter. If the species be a Myrmedoniid, having the tarsi 4–5–5-jointed, the palpi are also to be observed for the terminal appendage, which if present will indicate one of the Hoplandriæ; if not and the middle coxæ be very widely separated it may be a *Tinotus* or a *Myrmedonia*, sculpture deciding to external view; if the coxæ are not very widely separated the first joint of the hind tarsi will usually decide, if short as to the Athetæ, or long as to *Gnypeta* and allies, but exceptions occur; for example in the Athetid *Athetalia*, the basal joint is long; general habitus will be the best criterion in such cases. If the species prove to be a Bolitocharid, having 4–4–5-jointed tarsi, the degree of separation of the middle coxæ will show whether it is a Gyrophænid—widely separated—or a Leptusid—narrowly separated,—and so on. These are only most superficial suggestions, as for instance narrow-necked species occur in all the tribes, which, if an Aleocharinid, will be an *Echidnoglossa*, if a Myrmedoniid a Falagriid, if a Bolitocharid an *Autalia* and if a Hygronomid, having all the tarsi 4-jointed, a *Bamona*.

There are many striking recurrences of an almost similar habitus in all the tribes of the tarsal system of classification in the Aleocharinæ. *Tinotus*, *Hydrosmecta* and *Falagria* of the Myrmedoniini, for example, forcibly recall respectively *Aleochara* of the Aleocharini, *Thecturota* of the Bolitocharini and *Echidnoglossa* of the Aleocharini, as well as *Autalia* of the Bolitocharini and *Bamona* of the Hygronomini. *Aleuonota* of the Myrmedoniini greatly resembles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Gyronycha of the Hygronomini, *Oxypoda* of the Aleocharini *Coprothassa* of the Myrmedoniini and so on in many other cases. A question might arise therefore, as to whether subdivisions based on tarsal structure are entirely natural. This I cannot venture to determine at present and can only state that it is the most convenient system that has been devised, with a very great probability that the recurrent resemblances above noted in part are merely accidental adaptations to similar general environmental conditions, or due to common elements in the environment or habits, and are in no way essentially phylogenetic in significance. This being assumed, it seems evident that the heterogeneity of the tarsi in the genera allied to *Myllæna*, the three genera *Myllæna*, *Deinopsis* and *Gymnusa* having divergencies among themselves in tarsal characters nearly similar to those serving to define tribes in the Aleocharinæ proper, indicates that these three genera should constitute a subfamily equivalent in value to the Aleocharinæ or Tachyporinæ, between which their structure as well as general habitus undoubtedly places them.

The species described in the present paper are all confined to North America, north of the Mexican boundary, excepting *Aloconota flexibilis*, *Hydrosmecta depresseola* and *Nosora azteca*, which form part of the fauna of Mexico.

Subfamily ALEOCHARINÆ

Tribe ALEOCHARINI.

Baryodma Thoms.

The species placed under this heading in my revision of the genus (Tr. Ac. St. Louis, XVI, p. 150 et seq.), seem to comprise some groups which have received special names in the European fauna, such as *Coprochara* Rey., but at present I do not perceive enough structural diversity to warrant more than a single name. The three following species are to be placed near *insulana* Csy.:

Baryodma rubricalis n. sp.—Rather stout and convex, subparallel, shining, black, the legs blackish-piceous, the elytra entirely rufous; punctures moderately fine, everywhere sparse, except on the elytra where they are stronger, asperate and closer; pubescence rather long and coarse but sparse, subochreous though not conspicuous; head two-thirds as wide as the prothorax, the antennæ deep black, rather short, stout,

incrassate, the tenth joint three-fourths wider than long; prothorax fully one-half wider than long, convex, strongly rounded at base, the sides converging and arcuate from the broadly rounded and almost obliterated basal angles to the apex, the surface perfectly even in sculpture and convexity; elytra transverse, parallel, slightly wider and distinctly longer than the prothorax, the apices straight and anteriorly oblique outwardly; abdomen not quite as wide as the elytra, parallel, slightly narrowing apically, the sparse punctures becoming fine and very inconspicuous posteriorly, the sixth tergite (♂) truncate, with a series of fine graniform setose punctures along the edge but more correctly on the surface, the angles rounded; sixth ventral angulate, the angle rounded and the sides of the angle gently sinuate. Length 2.2–3.5 mm.; width 0.8–1.1 mm. British Columbia (Metlakatla),—Keen.

Differs from *insulana* in its larger head, much stouter antennæ and brighter red elytra. As in all the species of this genus the variation in size individually is very great.

Baryodma concurrens n. sp.—Almost similar, but with larger prothorax and smaller head, rather stout, convex, shining, black, the legs dark brownish distally, the elytra blackish-rufous; punctures sparse, moderately small, coarser on the elytra but not so close or asperate as in *rubricalis*, the vestiture rather long and palish but not dense; head slightly more than half as wide as the prothorax, the eyes moderate, not prominent, the antennæ longer than in the preceding, the fifth and sixth joints only a little wider than long, obtrapezoidal; prothorax scarcely one-half wider than long, even in convexity and sculpture, rounded at base, the sides feebly converging and broadly arcuate, the basal angles very obtuse and broadly rounded; elytra at base as wide as the prothorax, at apex wider than any part of the latter, the sides evidently diverging; apices as in the preceding, the suture relatively shorter, only very slightly longer than the pronotum; abdomen parallel, nearly as wide as the elytra, the punctures strong and rather numerous basally, especially in the basal impressions, fine and sparse behind about the middle, the sixth tergite sinuato-truncate, with rounded angles and fine granuliform punctures in the type, the sixth ventral very broadly and evenly rounded, length 2.8–3.1 mm.; width 0.9 mm. British Columbia (Metlakatla),—Keen.

Distinguishable readily from the preceding by the relatively larger and less transverse prothorax, smaller head, longer and less stout antennæ, less parallel elytra and stronger punctures in the basal abdominal impressions, the latter being almost punctureless in *rubricalis*.

Baryodma eludens n. sp.—General form and facies nearly as in *concurrens* but rather less stout, shining, convex, almost similarly punctured throughout, black or slightly piceous, the elytra paler, rufo-piceous, the legs dark brown throughout; pubescence sparse but long, not very pale, bristling; head moderate, about three-fifths as wide as the prothorax, the

black antennæ moderate in length and not strongly incrassate, the outer joints less than one-half wider than long, the second and third long, equal, slender, the first stouter and a little longer; prothorax formed nearly as in *concurrens* but rather more transverse, more strongly punctured and with the sides more converging from base to apex; elytra similar but relatively wider and a little more transverse, the suture equal in length to the pronotum; abdomen nearly similar throughout. Length 3.6 mm.; width 1.0 mm. California (Marin Co.).

Closely allied to *concurrens* but differing in the relatively larger head and smaller prothorax, more narrowed from base to apex, in the slightly longer and more bristling vestiture and less parallel form of the body.

Baryodma pumilio n. sp.—Slender, subparallel, moderately convex, polished, black, the legs piceous-brown, the elytra piceous-black, each with a large pale spot near the inner apical angle; pubescence very sparse, erect, not conspicuous; head relatively large, nearly two-thirds as wide as the prothorax, the antennæ short, very stout, moderately incrassate, the second and third joints moderately elongate, subequal, each much shorter than the first, the tenth more than twice as wide as long, the eleventh large, nearly as long as the three preceding; prothorax nearly as in *verna* but shorter, less dilated than in *minuta;* elytra parallel, not very transverse, slightly wider than the prothorax, the suture about equal in length to the latter, the punctures rather coarse but well separated; abdomen parallel, nearly as wide as the elytra, less punctured than in *verna* and more slender than in *minuta*, the sixth tergite (♂) truncate with rounded angles, the adjoining surface with a few coarse elevated setose punctures laterally but not at the middle, the sixth ventral obtusely produced and narrowly rounded at the middle, the lobe with a fringe of long close setæ. Length 1.9 mm.; width 0.42 mm. Iowa (Cedar Rapids).

This is the smallest *Baryodma* known to me; it is much more slender than the Californian *minuta*. The type was included with the *minuta* cotypes in my original study of that species (l. c., p. 161).

Baryodma tolerata n. sp.—Very slender, subparallel and rather convex, shining, black, the elytra and legs blackish-piceous, each of the former with a pale spot near the inner apical angle; pubescence coarse, sparse and suberect; head relatively large, almost three-fourths as wide as the prothorax, the antennæ black, moderately short, not very stout though distinctly and gradually incrassate distally, the first three joints decreasing uniformly and rather rapidly in length, the tenth twice as wide as long, the last longer than the two preceding; prothorax two-fifths wider than long, the sides but feebly converging and slightly arcuate from the rounded base to the apex, the basal angles broadly rounded; punctures fine and remote, becoming coarse and close in the two subimpressed longitudinal lines basally; elytra a little wider than the pro-

thorax, the suture equal in length to the latter, the punctures somewhat coarse and subasperate but rather well separated; abdomen with numerous subasperate punctures, the sixth tergite (♂) densely asperate throughout, truncate with broadly rounded angles, the edge throughout with strong close-set asperate and setose punctures, the sixth ventral plate short, broadly angulate and briefly fringed at apex. Length (extended) 3.0 mm.; width 0.68 mm. California (Dunsmuir),—Wickham.

Allied rather closely to *verna* Say, but much more slender than any of an extensve series of that species before me, from all parts of the country, and with a relatively much larger head.

Maseochara Sharp.

Tithanis Csy.

The following species was overlooked in drawing up my revision of this genus (Tr. St. Louis Acad. Sci., XVI, p. 168):

Maseochara musta n. sp.—General characters, coloration, sculpture and pubescence as in *puberula* but very much narrower in form, black, the elytra each very feebly suffused with dark rufo-piceous broadly toward the suture except basally, the legs dark red-brown; head nearly circular, the eyes moderately convex and at one-half more than their own length from the base, the antennæ thick and gradually incrassate, as long as the head and prothorax, black, the first three joints dark red-brown, the outer joints rather strongly transverse, obtrapezoidal, the last obtusely ovoidal, fully as long as the two preceding; prothorax a third wider than long, two-fifths wider than the head, widest before the middle, the sides broadly arcuate, straighter and converging toward base, which is rounded and about as wide as the apex; median line finely, feebly impressed anteriorly; elytra strongly transverse, the sides rounding, especially toward base, evidently wider than the prothorax, the suture three-fourths as long as the latter; abdomen long and parallel, fully as wide as the elytra, shining, the tergites with rather strong and moderately close punctures, less evident toward their bases, Length 4.0 mm.; width 0.85 mm. Southeastern Arizona (probably near Benson).

Distinguishable from *puberula* at a glance by its very much more slender form, relatively smaller head and prothorax and somewhat shorter elytra.

Rheobioma Csy.

There are evidently a number of species of this hitherto monotypic genus in the more southern parts of the Sierra system; the following is about as stout as *disjuncta* but has much longer and heavier antennæ:

Rheobioma terrena n. sp.—Stout, rather convex, fusoid, somewhat

shining, pale piceo-flavate, the head and abdomen slightly darker, blackish-piceous, the legs pale; punctures moderately large, rather close-set, finer and less conspicuous on the abdomen, the vestiture pale, short, rather abundant; head parallel, with rounded sides, as long as wide, the antennæ fully half as long as the body, brown, gradually pale basally, gradually incrassate and heavy distally, the second joint equal in length to the first but more slender, shorter than the third, the fourth much longer than wide, ninth as long as wide, tenth a little wider than long, the last gradually obtusely pointed and as long as the two preceding; prothorax one-half wider than the head and nearly one-half wider than long, parallel, the sides evenly arcuate; base wider than the apex, broadly rounded, the angles obtuse and rounded; surface evenly convex and punctate, with a rounded impression before the scutellum; elytra large, but little shorter than wide, slightly wider and much longer than the prothorax, the sides feebly diverging from the base, the apices broadly sinuate laterally; abdomen distinctly narrower than the elytra, the sides feebly converging and slightly arcuate from base to apex, the fifth tergite much longer than the fourth; sixth ventral, in the type, very narrow and narrowly rounded. Length 3.0 mm.; width 0.9 mm. California (Licking Fork of the Mokelumne River, —3000 ft.),—Blaisdell-Letcher.

To be known easily by the long heavy antennæ, pale coloration, large elytra and distinct punctuation, the latter being stronger though sparser on the pronotum than in *disjuncta* Csy.

Rheobioma marcida n. sp.—Much more slender and parallel, moderately convex, strongly shining, testaceous, the head a little darker, the elytra somewhat yellowish, the abdomen feebly clouded except at apex and toward base, the legs pale; punctures rather fine and close, evidently dense on the elytra, still finer but numerous on the abdomen, the vestiture palish, fine, short and abundant; head as long as wide, parallel and broadly rounded at the sides, the antennæ piceous-brown, slightly paler basally, rather short, gradually and distinctly incrassate distally, the second joint a little longer than the first and very much longer than the third, the outer joints distinctly wider than long, the last short, obtuse, not as long as the two preceding; prothorax relatively smaller than in the preceding though of the same general form, rather shorter and less convex, scarcely two-fifths wider than the head, the ante-scutellar impression distinct, transversely oval; elytra well developed, slightly shorter than wide, distinctly wider and very much longer than the prothorax, the sides very feebly diverging from the base, the apices rather deeply sinuate laterally; abdomen narrower than the elytra, parallel, narrowing a little only at apex, the fifth tergite much longer than the fourth; middle coxæ almost contiguous, the mesosternal process more slender than in *disjuncta* though otherwise similar, the metasternum transverse and feebly arcuate, much less so than in *terrena*. Length 2.75 mm.; width 0.66 mm. California (Lake Tahoe).

Readily distinguishable by its narrower and more parallel form and much shorter antennæ.

Emplenota Csy.

Polystoma || Steph.

Emplenota longiceps n. sp.—Narrow, parallel, rather depressed, dull in lustre, the elytra slightly, the abdomen strongly, shining; color deep black, the elytra testaceous except at base and externally; punctures rather coarse and well separated, still sparser on the abdomen, where they are wholly wanting in the impressions of the four basal tergites; vestiture sparse but long, pale and laniform; head large, rather longer than wide, parallel and nearly straight at the sides, three-fourths as wide as the prothorax, the eyes well developed but not prominent; antennæ black, moderately long and incrassate, the first three joints decreasing, the outer joints obtrapezoidal and about one-half wider than long, the last pyriform, not as long as the two preceding; punctures coarse and distinct, wanting in a broad entire median line; prothorax two-fifths wider than long, parallel, with evenly arcuate sides and broadly rounded base, the basal angles very obtuse but not much rounded; surface slightly elevated before each side of the scutellum, broadly flattened medially; elytra slightly shorter than wide, parallel, distinctly wider and much longer than the prothorax, the apices evenly arcuato-truncate; abdomen parallel, only very slightly narrower than the elytra, the sides straight, with rather thick margins, the fifth tergite distinctly longer than the fourth. Length 3.8 mm.; width 0.8 mm. British Columbia (Metlakatla),—Keen.

Separable from *trilimbata*, to which it is somewhat closely allied, by the more elongate, more rectilinearly parallel and more strongly punctured head, with decidedly larger though less prominent eyes, longer antennæ and longer and more shaggy vestiture.

Microglossa Kr.

The only species occurring in this country hitherto recognized as belonging in the neighborhood of this genus, is the imported *Crataræa suturalis* Mann., which I have from Europe, Rhode Island and Iowa. The following seems to be a true *Microglossa:*

Microglossa grandiceps n. sp.—Stout, parallel, convex, shining, dark rufo-piceous, the legs barely at all paler, the head and abdomen slightly blackish, the pubescence moderately short, rather sparse and inconspicuous; anterior parts nearly smooth, the punctures small, sparse and very feeble, the elytra strongly, more closely and asperulately punctate, the abdomen finely and sparsely, the three deep subequal basal impressions almost punctureless; head large, convex, wider than long, fully three-fourths as wide as the prothorax, parallel, the eyes moderate, slightly prominent and anterior; antennæ piceous, rather short, stout, incrassate, the basal joint much longer than two or three, which are subequal, the outer joints transverse, the last large, stout; prothorax

one-half wider than long, widest before the base, the latter strongly rounded, the sides converging and strongly arcuate, the basal angles broadly rounded and obliterated; surface even and strongly convex, with mere vestige of a minute elongate ante-scutellar impression; elytra moderately transverse, parallel, equal in width to the prothorax and slightly longer, the apices feebly sinuato-truncate laterally; abdomen thick, parallel, about as wide as the elytra; basal joint of the long and rather slender hind tarsi as long as the next two combined; middle coxæ very sensibly separated, the mesosternal process extending to their apical fourth or fifth, truncate and rather wide at the very free tip, with strong fine lateral beading, the metasternum transverse, slightly arcuate, separated from the process by a sunken convex ridge. Length 2.8 mm.; width 0.82 mm. California (locality not recorded).

This species is not so stout as the European *gentilis* Märk., and the prothorax is much less transverse, the head relatively larger and the basal impressions of the abdomen deeper medially. The infra-lateral carinæ of the head are distinct and apparently entire.

Melanalia n. gen.

The body is rather small and slender, parallel to feebly fusoid, moderately convex, the middle coxæ very narrowly separated, the mesosternal process becoming gradually very finely aciculate and extending to their apical fifth, separated from the narrowly and feebly, medially parabolic metasternum by a sunken convex ridge extending under its very free apex. The hind tarsi are rather long and slender, the basal joint even more elongate than in *Microglossa*, being but little shorter than the next three combined. The infra-lateral cephalic carinæ are strong and entire and the elytra are rather broadly and not very deeply sinuate laterally at their apices. The first three tergites are equally but not very strongly impressed at base, somewhat as in *Microglossa*, to which the genus is rather closely allied, differing in the more narrowly separated middle coxæ, with more aciculate mesosternal process, longer basal joint of the hind tarsi and narrower and slighter aspect of the body, giving it a distinctly different facies.

Melanalia tabida n. sp.—Parallel, moderately convex, rather shining, deep black, the elytra slightly picescent, the legs piceous-black; punctures very fine, rather sparse, closer and more distinct but not asperate on the elytra, fine though slightly asperate and rather numerous on the abdomen, the vestiture somewhat sparse and suberect but inconspicuous; head well developed, wider than long, the eyes moderately prominent, at their own length from the base, the tempora equally prominent;

antennæ black, moderate in length and distinctly incrassate though not very stout, rather slender basally, the first three joints gradually decreasing in length, the first the stoutest, fourth but slightly, the tenth nearly one-half wider than long, the last subpyriform and as long as the two preceding; prothorax much wider than the head, short, two-thirds wider than long, about as wide as the elytral base, the sides feebly converging and broadly arcuate from the obtuse though rather evident basal angles to the apex, the base broadly rounded; surface with a large shallow ante-scutellar impression, the median line, extending therefrom, finely and feebly impressed throughout; elytra large, but little shorter than wide, at apex somewhat wider than the prothorax, fully one-half longer, the sides very feebly diverging from the base and nearly straight; abdomen distinctly narrower than the elytra, parallel, with rather thin margins, the fifth tergite evidently longer than the fourth. Length 1.8–2.3 mm.; width 0.6 mm. California (Lake Tahoe).

To be known by the slender form and black coloration, short transverse prothorax and very well developed elytra. It is somewhat abundant at the locality cited.

Melanalia larvalis n. sp.—More fusoid or narrowed anteriorly than in *tabida*, piceous-black, the legs brown, not very shining, the punctures rather closer but everywhere very minute and feeble, close but very minute and almost invisible on the elytra, the vestiture paler, more abundant and more distinct than in the preceding; head much smaller and about as long as wide, the eyes not prominent and at barely their own length from the base, the tempora equally prominent; antennæ pale basally, the first and second joints subequal in length, the third a little shorter, fourth distinctly wider than long, the remainder missing in the type; prothorax small, rather more than one-half wider than long, evidently narrower than the elytral base though much wider than the head, the sides almost parallel and evenly arcuate, the base rounded, the angles obtuse but distinct; surface not or only very feebly impressed before the scutellum; elytra relatively very large, scarcely shorter than wide, very much wider and at least three-fifths longer than the prothorax, the sides feebly diverging from the base and nearly straight; abdomen much narrower than the elytra, subparallel, the punctures very minute and scarcely at all asperate, somewhat close-set. Length 1.75 mm.; width 0.5 mm. California (Hoopa Valley, Humboldt Co.).

Readily distinguishable from the preceding by the smaller and less transverse head and prothorax, more distinct vestiture and finer, closer punctures.

Melanalia tetricula n. sp.—Somewhat fusoid, moderately convex and shining, blackish-piceous, the elytra slightly paler, the legs flavo-piceous; punctures throughout close-set but very fine and feeble, the vestiture fine, palish, close and subdecumbent; head slightly wider than long, parallel at the sides, the eyes rather convex and at slightly less than their own length from the base; antennæ piceous-brown, the basal joint paler,

short, compact and distinctly incrassate distally, the first two joints subequal in length, the third elongate though a little shorter, the fourth evidently, the outer joints strongly, transverse, the last subcylindric, rapidly and ogivally pointed at tip, longer than the two preceding; prothorax nearly one-half wider than long, much wider than the head, not distinctly narrower than the elytral base though much narrower than the apex of the latter, the apex broadly arcuate, the base still more rounded, the sides feebly converging and moderately arcuate from the very obtuse but evident basal angles to the apex; surface even and convex, excepting a very small and rounded shallow ante-scutellar impression; elytra large, rather rapidly broadening from base to apex, with almost straight sides, not much shorter than wide and about one-half longer than the prothorax; abdomen distinctly narrower than the elytra, parallel, narrowing slightly at apex, about as shining as the anterior parts. Length 2.2 mm.; width 0.5 mm. California (Soda Spring, Anderson Valley, Mendocino Co.).

Distinct from *larvalis* in the more transverse head and slightly larger and evidently more convex eyes, longer and less parallel prothorax and finer, somewhat denser pubescence.

Thiasophila Kr.

The species of this genus are stout, very roughly sculptured and subparallel, without the abruptly narrowed slender abdomen of *Ischnoglossa angustiventris* and *asperata*, which I assigned erroneously to *Thiasophila* (Ann. N. Y. Acad., VII, p. 303). The genus is distinguished furthermore by a somewhat notable character affecting the last antennal joint, unobservable either in *Acrimea* or *Ischnoglossa* which follow, this joint being divided transversely by a conspicuous suture just beyond the middle of the length; the apparent suture is very distinct in the three American species but is less distinct though visible and more apical in the European *angulata* Er.; it conveys the impression of two connate joints and its origin and significance are unknown.[1] The following are two species in addition to *laticollis* Csy. (l. c., p. 302):

Thiasophila blanchardi n. sp.—Stout, parallel, rather convex, dark red-brown, the elytra but slightly, the legs much, paler; surface strongly, densely, asperately punctured and dull, the abdomen more minutely but fully as closely punctate and less dull, the pubescence short, even, subdecumbent, close, palish and distinct, not notably coarse; head transverse, evenly convex, a little more than half as wide as the prothorax,

[1] A somewhat similar constriction in the last antennal joint is observable in *Oxypoda gatosensis*, Bernh., and *fusiformis*, Csy., but in these species the stricture is situated behind the middle of the joint.

parallel at the sides, the eyes prominent, very finely faceted, at a little less than their own length from the base; antennæ pale brown, not very short, gradually and moderately incrassate, the second joint slightly shorter than the first and distinctly shorter than the third, four to six distinctly longer than wide, the tenth obtrapezoidal, a third wider than long, the last as long as the two preceding, the transverse suture beyond the middle distinct; prothorax fully two-thirds wider than long, distinctly wider than any part of the elytra, widest slightly behind the middle, the sides evenly and strongly arcuate, converging and straighter anteriorly; base arcuate, becoming feebly sinuate at each side, the angles nearly right and not rounded; surface with a broad and very feeble median impression from near the base almost to the centre: elytra rather transverse, parallel, with straight sides, the suture about as long as the prothorax, the apical sinuses deep; abdomen but little narrower than the elytra, parallel, with thick margins, the tip paler, the fifth tergite (♂) not longer than the fourth, with a minute feeble tubercle on the median line at some distance from the apex, the sixth short, rapidly narrowed to the apex, which is evenly sinuate in circular arc between the rather prominent angles, the edge of the sinus minutely and rather obtusely crenulate. Length 2.7 mm.; width 0.8 mm. Massachusetts (Tyngsboro),—Frederick Blanchard.

Readily distinguishable from *laticollis* by its stouter form, larger and more transverse head and relatively shorter and more transverse elytra, the suture in that species being very distinctly longer than the prothorax and the pronotum without the large feeble basal impression of *blanchardi;* the abdomen in the latter, also, is more finely and closely punctured. The original type of *laticollis* is a male, having the same modification of the sixth tergite as *blanchardi*, the sinus however having stronger, less close and more acute crenulation, but there is no trace of the minute tubercle of the fifth tergite.

Thiasophila wickhami n. sp.—Coloration and sculpture nearly as in the preceding, the form not so stout, the sculpture of the abdomen more distinctly imbricate than in any other species; head similarly transverse, relatively a little larger, very distinctly more than half as wide as the prothorax, the eyes rather smaller and less prominent; antennæ much smaller, a little less incrassate, blackish-piceous, slightly paler basally and at the tip, the second joint much shorter than the very elongate third, fourth slightly elongate, obtrapezoidal, fifth to eleventh more densely pubescent than the first four as usual, the fifth as long as wide, tenth slightly wider than long, the last fully as long as the two preceding, with the transverse division very strongly marked; prothorax short, fully three-fourths wider than long, exactly equal in width to the elytra, the sides broadly, evenly rounded, converging anteriorly, becoming subparallel behind the middle, the base broadly rounded, feebly sinuate

laterally, the angles nearly right and distinct; surface not impressed basally; elytra rather transverse, parallel, the suture just visibly longer than the pronotum, the apical sinuses rather pronounced; abdomen rather long, perfectly parallel, evidently narrower than the elytra, the fifth tergite distinctly longer than the fourth. Length 2.8 mm.; width 0.7 mm. Iowa (Iowa City),—H. F. Wickham.

The single type in my collection is a female but represents a species differing in many directions from the preceding or *laticollis*, as may be inferred; in the latter the elytra are relatively very much longer. *Wickhami* is taken in company with a brown ant about 4 mm. in length, having two spines transversely placed on the metathorax and two nodular segments composing the abdominal peduncle.

Acrimea n. gen.

This genus is related to both *Thiasophila* and *Ischnoglossa*, but differs from the former in having no trace of the constrictional division of the last antennal joint and from the latter in the form of the abdomen, which at base is as wide as the elytra, gradually tapering thence to the apex; and from both it differs in the very convex prothorax and character of the abdominal sculpture, the punctures being finer and each having two short fine feebly diverging incised lines proceeding posteriorly therefrom. The general form of the body is stout as in *Thiasophila*. The following are three very clearly defined species of this purely American genus:

Acrimea resecta n. sp.—Stout, moderately convex, rather shining throughout, finely, closely, asperately punctate, the abdomen more finely and less closely, the pubescence short, somewhat fine, subdecumbent, pale and distinct though not very dense; body dark red-brown, the elytra but little paler, the head and abdomen slightly darker, except at the apices of the segments; head nearly as long as wide, more orbicular than in the preceding genus; eyes moderate, not at all prominent; antennæ short, pale, rapidly and very strongly incrassate, the second joint much shorter than the third, fourth slightly elongate, the tenth twice as wide as long, the last short, conoidal, as long as the two preceding, not bipartite; prothorax strongly transverse and convex, much wider than the head, distinctly wider than the base and as wide as the apex of the elytra, the sides subparallel and evenly arcuate, the truncate apex almost as wide as the broadly arcuate base, the basal angles obtuse and somewhat blunt though evident; surface very evenly and strongly convex and distinctly shining throughout, not at all impressed; elytra short and transverse, the sides feebly diverging and arcuate, the suture not quite so long as the prothorax; abdomen large, at base virtually as wide as the elytra, the sides thence feebly converging and straight,

with thick margins, to the apex of the fifth tergite, which is not quite as long as the fourth, the three basal impressions large and deep; sixth tergite in the type broad and feebly sinuato-truncate, almost even, the sixth ventral broad and feebly arcuate at tip. Length 2.2 mm., width 0.77 mm. Idaho (Cœur d'Alene),—Wickham.

To be known readily from the two following by its rather stouter form and finer punctures and vestiture.

Acrimea acerba n. sp.—Moderately stout, blackish-piceous, the elytra slightly paler, the legs dark brown, feebly shining, the punctures rather close, strongly asperate on the elytra, somewhat sparse, very feeble and bilinear on the abdomen, the vestiture short, subdecumbent, somewhat close and coarse, palish; head notably small, but little more than half as wide as the prothorax, as long as wide, somewhat wider basally than at the eyes, which are not at all convex, finely faceted and at more than their own length from the base, the tempora feebly arcuate, the surface evenly convex; antennæ pale brown, rather short, very strongly incrassate, the third joint much elongated, not so very much shorter than the first two combined, the fourth a little longer than wide, tenth not quite twice as wide as long, the last ogival, rather longer than the two preceding, simple; prothorax very transverse and evenly convex, nearly as in *resecta* but smaller, only a little wider than the elytral base and somewhat narrower than the apex; elytra transverse and short though less so than in the preceding, the suture very nearly as long as the prothorax; abdomen as in the preceding but more tapering from base to apex, with feebly arcuate sides and very thick margins, the basal tergites, and especially the third, less impressed, the sixth (♂) with a very shallow median sinus at apex, the sides of the sinus with about three small acute crenules, the median part slightly produced in a small rounded lobe, the sixth ventral plate circularly rounded. Length 2.4 mm.; width 0.7 mm. Washington State (North Yakima),—Wickham.

Distinguishable at once from *resecta* by its less stout form, more tapering abdomen with much feebler sculpture and less impressed basal tergites, smaller head and coarser vestiture.

Acrimea fimbriata n. sp.—Stout, rather pale ferruginous, the head and fourth tergite blackish, the legs pale, somewhat shining, the punctures rather fine and well separated, very asperate on the elytra, feeble and bilinear on the abdomen; pubescence loose, subdecumbent, pale fulvous and coarse, very coarse on the elytra, more hair-like and longer on the abdomen, the fringe at the apical part of each tergite conspicuous; head small, orbicular, as long as wide, the eyes not convex and at their own length from the base; antennæ blackish, gradually flavescent basally, short, very strongly incrassate distally, the first three joints equal in length, the fourth somewhat longer than wide, the tenth about twice as wide as long, the last gradually obtusely pointed, longer than the two preceding; prothorax nearly as in the two preceding but less dilated and barely as wide as the elytral base, the elytra less transverse, parallel,

with the sides but very feebly arcuate, the suture very slightly longer than the prothorax; abdomen slightly narrower than the elytra and parallel basally, gradually moderately narrowing with feebly arcuate sides posteriorly from about the middle, the margins very thick, the three basal impressions deep but rather fine, the fifth tergite equal in length to the fourth, the sixth (♂) broadly and feebly sinuato-truncate medially, with the edge wholly unmodified, the sixth ventral narrow, rounded at tip, with the apex truncate. Length 1.85 mm.; width 0.6 mm. Oregon (The Dalles),—Wickham.

In the male the head is broadly concave medially, the concavity clothed with longer shaggy hair, a character wholly wanting in the male of *acerba* and furnishing an example of the polarity theory of sexual characters held by LeConte, the sexual characters at the ventral apex being pronounced in *acerba* but very feeble in *fimbriata*. It differs from *acerba*, besides, in the relative lengths of the basal antennal joints, also in the still coarser short hairs of the pronotum and especially of the elytra.

Ischnoglossa Kr.

The American species which are numerous, distributed from the Atlantic to the Pacific, conform very nearly in general habitus and structure with a European example before me labeled *Ischnoglossa* (*Dexiogya*) *corticina* Er. It is included under *Stichoglossa* Fairm., in the recent European catalogue and it is therefore possible that *Stichoglossa* may be the generic name that should be employed for these American species; they are very moderately convex, closely, asperately punctured, rather stout anteriorly but with the abdomen abruptly narrow and relatively slender. The following species are additional to *angustiventris* and *asperata*, alluded to above under *Thiasophila:*

Ischnoglossa abscissa n. sp.—Moderately stout and convex, red-brown throughout, the abdomen rather dusky except apically, the legs and antennæ wholly flavo-testaceous; punctures small and close-set, strongly asperate, more distinct on the elytra, fine but asperate on the abdomen, where the ground sculpture is feebly imbricate; pubescence pale, very short, decumbent; head much wider than long, evenly convex, parallel, the eyes somewhat convex and at less than their own length from the base; antennæ rather short, strongly incrassate, the first three joints about equal in length, the fourth distinctly wider than long, the outer joints strongly obtrapezoidal, tenth fully one-half wider than long, the last simple, without transverse suture and rather longer than the two preceding; prothorax two-thirds wider than long and nearly three-fourths

wider than the head, widest just behind the middle, where it is slightly wider than the elytra, the sides rounded, more converging anteriorly, the base strongly, evenly arcuate, becoming transverse near the angles, which are slightly more than right but not at all blunt; surface evenly and moderately convex, unimpressed; elytra parallel, only moderately transverse, the suture just visibly longer than the prothorax; abdomen slender, much narrower than the elytra, parallel, narrowing a little and very pale apically, the fifth tergite much longer than the fourth, the sixth (♂) truncate medially at apex, the truncature with about six slender aciculate close-set serrules and separated at each side from a slender porrect spicule by a moderate sinus. Length 1.85 mm.; width 0.48 mm. Rhode Island (Boston Neck).

Related to *angustiventris* but separable at once by its very short vestiture and much stouter, more incrassate antennæ; the type was inadvertently included under that species in my original description. *Angustiventris*, described originally from Cedar Rapids, Iowa, has since been collected by Wickham at Iowa City.

Ischnoglossa tenuicauda n. sp.—Rather stout and convex anteriorly, the abdomen slender, slightly shining, dark red-brown, the abdomen with a blackish cloud at the fourth tergite, the head also blackish; punctures small but rather close-set and asperate, dense on the elytra, the pubescence short, rather abundant and subdecumbent; head small, convex, transverse, the eyes convex and prominent, at about half their length from the base, the tempora less prominent; antennæ pale, moderately short, strongly incrassate, the first three joints subequal in length, the fourth about as long as wide, the outer joints more than one-half wider than long, the last longer than the two preceding; prothorax formed nearly as in *abscissa*, but widest more nearly at the middle, less dilated and not wider than the elytra, the latter relatively larger, parallel, the suture distinctly longer than the prothorax; abdomen much narrower than the elytra, slender, parallel, with thick margins, feebly narrowing apically, the sexual characters nearly as in *abscissa*. Length 2.3 mm.; width 0.56 mm. Florida.

Differs from *abscissa*, to which as well as *angustiventris* it is allied, by its relatively larger elytra, smaller head and more elongate fourth antennal joint; from the latter it differs, in common with *abscissa*, in its much shorter vestiture. The type was erroneously included with the types of *angustiventris* in my description of that species.

Ischnoglossa intenta n. sp.—Moderately stout and convex, the abdomen very slender, red-brown, the legs and antennæ still paler, the tergites all blackish at their bases; surface feebly shining, finely, closely, asperately punctate, the vestiture pale, very short, rather close and fine, longer though very fine on the abdomen; head small, convex, transversely

orbicular, the eyes convex and at about half their length from the base; antennæ moderate in length, stout, gradually moderately incrassate, the first three joints subequal in length, the fourth about as long as wide, the outer joints fully one-half wider than long, the last elongate-oval and longer than the two preceding, simple; prothorax nearly as in *abscissa* though shorter, still more greatly exceeding the head in width and less greatly though very evidently wider than any part of the elytra, the latter narrower and less transverse, parallel, the suture fully a fourth longer than the prothorax; abdomen long and very slender, much narrower than the elytra, parallel, with thick margins, feebly narrowed apically, the sexual characters nearly as in the two preceding. Length 2.0 mm.; width 0.4 mm. Iowa (Iowa City),—Wickham.

This species may easily be distinguished from *abscissa* by its narrower form and more slender abdomen, smaller head and longer and less incrassate antennæ, with more elongate fourth joint; from *tenuicauda* it may be known by its narrower form and smaller and relatively more elongate elytra, and from *angustiventris* by its very much shorter vestiture and narrower elytra and abdomen, among other features.

Ischnoglossa alticola n. sp.—Moderately stout and convex, rather dull, the abdomen alutaceous, red-brown, the head and third and fourth tergites shaded slightly darker, the legs pale; punctures dense and asperate, very fine on the abdomen; vestiture pale, only moderately short and not very fine, abundant; head much wider than long, three-fifths as wide as the prothorax, convex, the eyes feebly prominent and at less than their own length from the base; antennæ moderately long, pale, the first three joints subequal in length, the fourth fully as long as wide, fifth and following abruptly much wider and more densely pubescent as usual, the tenth more than one-half wider than long, the last as long as the two preceding; prothorax only about three-fifths wider than long, the truncate apex not very much narrower than the rounded base, the sides subparallel and subevenly, rather strongly arcuate, the basal angles obtuse though distinct, the surface wholly unmodified; elytra fully as wide as the prothorax, parallel, with feebly arcuate sides, moderately transverse, the suture but slightly longer than the pronotum; abdomen evidently narrower than the elytra, parallel, narrowing slightly apically, the fifth tergite but little longer than the fourth, the three basal impressions rather deep and fine. Length 1.9 mm.; width 0.43 mm. California (Truckee).

The single female type was erroneously considered with the Lake Tahoe *asperata* under the original description of the latter species; it is stouter than *asperata*, with a relatively wider abdomen, less abbreviated prothorax, relatively shorter elytra and larger and more transverse head; the last antennal joint is shorter, this being

much longer than the two preceding in *asperata;* the punctures throughout are finer and closer than in that species, except on the abdomen, and the pubescence is a little longer. Five specimens before me from Siskiyou County, may be considered specifically identical with *alticola*, although they differ in a few minor points.

Phlœopora Erichs.

Phlœopora sublævis Csy., is perfectly congeneric with the European *corticalis* Grav., in general facies, smaller prothorax and shining surface, but the middle coxæ are much less widely separated and the mesosternal process aciculate and not rather broad and truncate, though similarly attaining the apex of the long angulate metasternal projection. In *ferruginea*, *oregona* and the three described below, which form a distinctly defined group or subgenus, the coxæ and sterna are as in *sublævis*, but the habitus of the body is quite different, the surface generally being duller and more densely sculptured and the prothorax much more transverse.

Phlœopora debiliceps n. sp.—Small, slender, subparallel, only very moderately convex and shining, black, the elytra gradually rufescent behind the middle, the legs piceous; punctures strong, rather close-set and asperate throughout, not denser or much stronger on the elytra than anteriorly, very sparse toward the abdominal apex, parted along the middle on the head except basally; pubescence rather stiff, moderately close, not conspicuous; head rather small, slightly wider than long, parallel and nearly straight at the sides, the eyes slightly prominent and at a little more than their own length from the base; antennæ piceous-black, paler basally, moderate in length, gradually but not very strongly incrassate distally, the first joint much longer than the second, the latter a little longer than the third, which is constricted at base, the fourth distinctly transverse, the tenth about one-half wider than long, the last as long as the two preceding; prothorax two-fifths wider than long, distinctly wider than the head, parallel, with feebly arcuate sides, the base broadly rounded, the angles obtuse but distinct, the surface unimpressed; elytra quadrate, about as long as wide, distinctly wider and much longer than the prothorax, the sinuses of the apex wholly obsolete; abdomen slender, perfectly parallel, with straight sides, much narrower than the elytra; tergites three to five increasing in length. Length 1.7 mm.; width 0.28 mm. Nevada (Elko),—Wickham.

To be identified readily by its small size, slender form, rather small head, absence of sinuses at the elytral apices and asperate punctures.

Phlœopora liberta n. sp.—Slender, subparallel, moderately convex,

piceous-black, the prothorax, elytral apex and humeri and a fine apical border of the basal abdominal segments pale red-brown, the legs very pale; head and pronotum dull, with very fine close sculpture and obsolete punctures, the elytra and abdomen with moderate asperate punctures, close on the former, feeble toward the apex of the latter; pubescence close, pale and evident; head large, slightly transverse, parallel, the eyes rather large and convex, at somewhat less than their own length from the base; antennæ short and very stout, piceous, paler basally, the first joint a little longer but not stouter than the second, the third shorter, pedunculate basally, fourth to tenth extremely short and transverse, perfoliate, between two and three times as wide as long, the last obtuse, longer than the two preceding; prothorax but very slightly wider than the head, moderately transverse, parallel, the sides broadly arcuate, straighter posteriorly, the angles obtuse but distinct, the base rounded, the surface unimpressed; elytra distinctly shorter than wide, a third wider and much longer than the prothorax, the apices distinctly sinuate laterally; abdomen narrow, perfectly parallel, with straight sides, much narrower than the elytra, the fifth tergite fully one-half longer than the fourth. Length 1.85 mm.; width 0.33 mm. North Carolina (Tryon).

Distinct in sculpture and in the very short and stout antennæ, well developed head and larger eyes.

Phlœopora adversa n. sp.—Slender, nearly as in the preceding, black, the elytra throughout, and the abdomen apically, pale red-brown, the prothorax brownish-black, the legs brown; sculpture nearly as in *liberta*, the asperulate punctures of the elytra and abdomen closer, the pale vestiture rather coarse and longer; head well developed, wider than long, the eyes moderate, at rather more than their own length from the base, the tempora behind them rather less prominent, parallel and straight, rounding rather broadly at base; antennæ piceous-brown, paler basally, short, the basal joint longer than the second, both cylindric, the third shorter and obconical, fourth moderately transverse, fifth to tenth more strongly and rather rapidly broader, the tenth fully twice as wide as long, the last ogival and as long as the two preceding; prothorax moderately transverse, distinctly though not greatly wider than the head, rather widest and more strongly rounded at the sides anteriorly, the sides thence feebly converging and nearly straight to the obtuse but distinct basal angles, the base broadly rounded; elytra about a fourth wider and much longer than the prothorax, parallel, moderately transverse, the apical sinuses deep; abdomen slender, parallel, four-fifths as wide as the elytra, nearly as in the preceding. Length 2.4 mm.; width 0.38 mm. California (Pomona, Los Angeles Co.),—Fall.

Distinguishable readily from the preceding by its more elongate basal and less transverse outer joints of the antennæ, rather smaller eyes and larger size.

Phlœopora jacobiana n. sp.—Nearly similar to the preceding though a little stouter, black, the elytra bright rufous, gradually shading to

black in less than basal half, the abdomen not paler apically, the legs pale brown; sculpture and vestiture nearly as in *adversa*, except that the abdomen is more asperate, the asperities not small and feeble on the fifth tergite as in that species but even coarser and more conspicuous than elsewhere; head nearly similar, the antennæ not so short, blackish-piceous in color throughout, the outer joints not quite so transverse and not increasing much in size distally; prothorax nearly similar though slightly shorter and more greatly exceeding the head in width; elytra similar though broader and relatively shorter, the relationship with the prothorax in width and length nearly similar, the apical sinuses deep; abdomen similar though relatively less elongate, only a little exceeding the anterior parts in length, differing however very greatly in the much shorter fifth tergite, which only slightly exceeds the fourth in length. Length 2.35 mm.; width 0.46 mm. California (San Diego),—Dunn.

Allied rather closely to *adversa* but stouter, differing in coloration, in its less abbreviated, more parallel and darker antennæ and especially in the relative extent and sculpture of the fifth abdominal tergite, which last however may be a male sexual character.

Oxypoda Mann.

In the wide and diversified continental expanses from New England to Alaska and southern California, the number of *Oxypoda* species already discovered is notably large, the various forms being localized to a marked degree as a rule, and but few of them, comparatively, are described thus far. Descriptions are here given of those remaining undefined in my collection, and it is convenient to divide them for this purpose into a few somewhat arbitrary groups, not as a taxonomic finality by any means, but merely to facilitate identification; these groups may be outlined as follows:

Antennæ relatively long and frequently heavy, though always gradually incrassate and not at all of the short stout clavate form seen in *hudsonica*, *californica* and *fustiger*, which should probably form a different genus.....Group I

Antennæ relatively small in size.....2

2—Prothorax relatively short and transverse, parallel or nearly so; elytra parallel, moderately developed.....Group II

Prothorax not notably short, always having the sides converging anteriorly and generally strongly.....3

3—Elytra relatively less developed and more parallel, the prothorax convex, usually somewhat swollen basally and apparently somewhat wider than the elytral base.....Group III

Elytra large, the prothorax relatively much smaller, not swollen at base, where it is usually only as wide as the elytral base, the elytra less parallel as a rule.....Group IV

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These groups are few in number, and, though somewhat indefinitely circumscribed and to a great extent morphologically meaningless perhaps, it will not be difficult to try more than one if in doubt as to the identification of any particular species.

Group I.

These species differ among themselves very much in size and facies and in almost everything except the length of the antennæ, these being notably elongate when contrasted with the three subsequent groups.

Oxypoda orbicollis n. sp.—Large, moderately stout and convex, nearly parallel, rather dull in lustre, pale brown throughout, the head, scutellar region and abdomen but little darker, the punctures and pubescence very fine and close-set throughout, the latter unusually short; head as long as wide, one-half as wide as the prothorax, convex, parallel and rounded at the sides, the eyes anterior, moderate and not at all prominent; antennæ long and notably heavy, gradually incrassate, pale, the first three joints equal in length, elongate, the fourth moderately elongate, tenth fully as long as wide, the last ogivally pointed at tip, as long as the two preceding; prothorax large, not quite a third wider than long, widest rather behind the middle, much wider than any part of the elytra, the apex three-fourths as wide as the base, which is broadly, evenly arcuate, the sides subevenly rounded, the basal angles obtuse and blunt; elytra small, parallel, slightly transverse, the suture barely four-fifths as long as the prothorax, the apical sinuses rather broad and feebler than usual; abdomen as wide as the elytra, subparallel, narrowing very little apically, the margins rather thick; fifth tergite much longer than the fourth but similarly densely sculptured and pubescent; tarsi long and very slender, filiform, the basal joint of the posterior fully as long as the next three. Length 3.1 mm.; width 0.8 mm. Wisconsin (Bayfield),—Wickham.

Readily recognizable by the subparallel form, pale color, very minute close sculpture and pubescence, large and feebly transverse, rounded prothorax and by the antennæ.

Oxypoda demissa n. sp.—Rather stout and convex, parallel, dull, very finely and densely punctured and pubescent throughout, pale yellow-brown in color, the scutellar region faintly darker, the head and abdomen black or nearly so, except the apex of the latter and the fine apices of the other segments; head three-fifths as wide as the prothorax, much wider than long, the eyes well developed, at rather less than their own length from the base; antennæ blackish, the four basal joints paler, long and heavy but with the outer joints only very slightly increasing, third shorter than the second, fourth to tenth similar in form though not in size, slightly transverse, the last not as long as the two preceding, obtusely

pointed at tip; prothorax nearly one-half wider than long, the sides but feebly converging and broadly arcuate from the obtuse and rather blunt basal angles to the subtruncate apex, the base strongly arcuate; elytra large, about as wide as the prothorax and subparallel, only just visibly shorter than wide, the suture much longer than the pronotum, the apical sinuses rather deep; abdomen parallel, barely at all narrowing apically, with the sides nearly straight, slightly narrower than the elytra, the fifth tergite slightly longer than the fourth; hind tarsi moderately long, the first joint not quite as long as the next three. Length 2.2 mm.; width 0.62 mm. Canada (probably southern Ontario).

Much smaller than the preceding and with a very different prothorax.

Oxypoda cruda n. sp.—Subparallel, slender, moderately convex, alutaceous, very finely and closely, asperulately punctate throughout, the vestiture fine, abundant and decumbent; color pale castaneous, the head and the abdomen, except apically and feebly at the apices of the basal segments, blackish, the legs pale; head orbicular, slightly wider than long, three-fifths as wide as the prothorax, the eyes well developed, at about their own length from the base; antennæ pale throughout, long, stout, gradually and strongly incrassate, the third joint much shorter and relatively stouter than the second, fourth evidently wider than long, the outer joints gradually much larger, the tenth less transverse, about two-fifths wider than long, the last scarcely longer than the two preceding, with the constriction beyond the middle distinct; prothorax two-fifths wider than long, subparallel, the sides broadly arcuate, converging somewhat more apically, the base broadly rounded, the angles very obtuse though distinct. the surface unimpressed; elytra but little shorter than wide, fully as wide as the prothorax, parallel, the suture about a third longer than the pronotum, the apical sinuses deep; abdomen much narrower than the elytra, perfectly parallel throughout, with straight sides, the fifth tergite fully one-half longer than the fourth; tarsi moderate, the basal joint of the posterior not as long as the next three. Length 1.9 mm.; width 0.42 mm. California (Truckee).

Identifiable by the parallel form, narrower abdomen and large thick antennæ.

Oxypoda cauta n. sp.—Narrowly subfusoid, moderately convex, piceous, the head blackish, the abdomen wholly black; elytra paler, castaneous, the legs pale; surface feebly shining, the punctures minute and only moderately dense throughout; pubescence rather long, moderately abundant, palish; head large, fully three-fourths as wide as the prothorax, wider than long, somewhat inflated basally, the eyes moderate, at more than their own length from the base, not at all prominent, the facets rather coarse and strongly convex; antennæ relatively long but slender, only very feebly incrassate, blackish, paler basally, the second and third joints each much longer than the first, the third only slightly shorter than the second, fourth to tenth somewhat transverse, increasing

but slightly, the last gradually acutely pointed, a little longer than the two preceding, not evidently constricted medially; prothorax two-fifths wider than long, narrowed but little apically, widest slightly behind the middle, the sides feebly arcuate; base rounded, the angles very obtuse, the surface unimpressed; elytra much shorter than wide, at base equal in width to the prothorax, at apex wider, the sides feebly diverging, straight, the suture equal in length to the pronotum; apical sinuses shallow; abdomen evidently narrower than the elytral apex, parallel, narrowing moderately and arcuately posteriorly from about the middle, the margins rather thin; fifth tergite exactly equal in length to the fourth, the sixth large; basal joint of the hind tarsi equal to the two following combined. Length 1.8 mm.; width 0.42 mm. Colorado (Greeley),—Wickham.

Distinguishable from any of the preceding by the thinner antennæ, less dense sculpture, shorter basal tarsal joint and fifth tergite as well as many other characters. It is quite possible that this is not an *Oxypoda*, although it has a good deal the habitus and a rather long basal tarsal joint; I cannot count the joints in the anterior tarsus of the single specimen at hand.

Oxypoda olescans n. sp.—Rather large and moderately stout, fusoid, black, the elytra not evidently paler but with a very fine pale apical margin, the legs pale brown; punctures very fine and close, asperulate on the elytra, dense on the abdomen, strongly alutaceous in lustre; vestiture palish, fine and abundant but very short; head wider than long, three-fifths as wide as the prothorax, the sides parallel, nearly straight, rounding only at base, the eyes at less than their own length from the base, rather large and convex; antennæ long, moderately thick and incrassate, blackish, paler basally, the second and third joints much elongated, slightly longer but thinner than the first, the third even somewhat longer than the second, fourth evidently longer than wide, tenth slightly transverse, the last longer than the two preceding, much compressed, obtuse at apex and feebly irregularly constricted at the middle; prothorax relatively small, fully one-half wider than long, evidently narrower than any part of the elytra, moderately narrowed apically, with evenly and rather strongly arcuate sides, the base rounded, the angles obtuse, the surface feebly impressed medially toward base; elytra large, only slightly shorter than wide, parallel, the suture nearly one-half longer than the prothorax, the apical sinuses rather broad and shallow; abdomen slightly narrower than the elytra, parallel basally, moderately and arcuately narrowing apically, with rather thin inclined margins, the fifth tergite but slightly longer than the fourth; tarsi long, slender, the basal joint of the posterior very long, equaling the next three combined. Length 2.4–3.2 mm.; width 0.65–0.8 mm. California (Humboldt to Sonoma).

To be known by its relatively somewhat large size, smaller prothorax, coloration and antennal structure, the third joint being proportionally very elongate.

Oxypoda inimica n. sp.—Stout, subparallel, convex anteriorly, feebly shining except the more opaque elytra, the punctures fine, feebly asperulate and everywhere close, the vestiture rather long, not very decumbent except on the abdomen; color blackish-piceous, the prothorax slightly paler; abdomen luteous, the fourth tergite black, the legs pale; head short and transverse, three-fifths as wide as the prothorax, the eyes slightly prominent, at less than their own length from the base; antennæ long, gradually moderately incrassate, pale piceous-brown, the basal joint paler, the third joint even somewhat longer than the second, fourth small, as long as wide, fifth longer, the ninth slightly shorter than wide, tenth as long as wide, the last rather longer than the two preceding, gradually ogivally pointed, constricted at the middle on the posterior side only; prothorax short, strongly transverse, the sides subparallel and strongly arcuate, the base rounded, the angles very obtuse, the surface convex, almost unimpressed; elytra as wide as the prothorax and nearly a third longer, subparallel, moderately transverse, the apical sinuses distinct; abdomen broad, transversely convex posteriorly, not quite as wide as the elytra, parallel, narrowed but little at the fifth tergite which is a third longer than the fourth; sixth segment large and conical; middle coxæ contiguous, the separating ridge laminate, the hind tarsi with coarse spinules beneath, the first joint about as long as the next three. Length 2.3 mm.; width 0.75 mm. Massachusetts,—Blanchard.

This species and the next will form at least a subgenus of *Oxypoda;* they have the well developed antennæ of Group I, with the short transverse subparallel prothorax of Group II, and are strikingly distinct in appearance; the anterior tarsi are 5-jointed without doubt.

Oxypoda gnara n. sp.—General form, coloration and sculpture nearly as in the preceding but much smaller, less stout and more parallel, the abdomen more indefinitely black through a larger median extent, the punctures extremely fine and close throughout, especially on the abdomen, the vestiture very minute, dense and decumbent; head larger, less transverse, more swollen basally and with smaller, less convex eyes at more than their own length from the base; antennæ rather long, blackish-piceous, paler basally, the second joint slightly longer and thinner than the first and notably longer than the third, the fourth distinctly, the fifth slightly, shorter than wide, the remaining joints gradually moderately incrassate, the tenth slightly wider than long, the last as in the preceding species; prothorax barely one-half wider than long, rounded at base, the sides but slightly arcuate and just visibly converging anteriorly, rounded basally, with an extremely minute and faint, scarcely discoverable ante-scutellar impression as in the preceding; elytra less transverse, parallel, slightly narrower than the feebly inflated basal parts of the prothorax, the suture barely a third longer, the apical sinuses deep; abdomen nearly as in the preceding but much narrower and with less thickened margins basally. Length 1.8 mm.; width 0.48 mm. Rhode Island (Boston Neck.)

Though allied to the preceding in its general structural features, this species may be distinguished at once by its much smaller size, narrower form, differences in the basal part of the antennæ, much larger head, less transverse and less convex prothorax, with much less arcuate sides and relatively narrower elytra and abdomen; it is represented by four examples and is compared with a series of three of the preceding.

Group II.

There are but two species of somewhat similar facies entering this group.

Oxypoda mobilis n. sp.—Moderately stout and convex, pale brown, the head and abdomen more blackish, the legs pale; surface alutaceous, the punctures fine and dense, coarser, more asperate and not so close on the more shining abdomen; vestiture fine, decumbent and very short, a little longer and less dense on the abdomen; head wider than long, fully three-fifths as wide as the prothorax, slightly swollen at base, the eyes somewhat convex and at three-fifths their length from the base; antennæ short, pale brown, rather stout, gradually distinctly incrassate, the second joint slightly longer than the first or third, the fourth about as long as wide, fifth to tenth transverse, the latter one-half wider than long, the last ogivally pointed, as long as the two preceding; prothorax three-fifths wider than long, rounded at base, the sides evenly and moderately arcuate and feebly converging from the obtuse and rounded basal angles to the apex, the surface with a small and very faint ante-scutellar impression; elytra parallel, slightly shorter than wide, equal in width to the prothorax, the suture two-fifths longer, the sinuses at apex distinct; abdomen much narrower than the elytra, proportionally slender, gradually moderately tapering and with straight sides from base to apex, the fifth tergite one-half longer than the fourth; basal joint of the hind tarsi elongate. Length 2.4 mm.; width 0.55 mm. Texas (El Paso).

To be known by the relatively short prothorax, narrow and gradually tapering abdomen and other characters as stated.

I do not remember to have seen any allusion to the frequently observable collapse of the last antennal joint, generally on its inner side, appearing often to be a natural excavation but merely due to shrinking of the integument on drying; it would seem to show that the interior of this joint is less compact and loses more by drying than that of the other joints. It is frequently very deceptive and liable to be mistaken for a true structural character.

Oxypoda rubescans n. sp.—Rather stout, slightly shining and flavo-testaceous, the head and abdomen blackish and more shining, the latter

feebly paler apically, the legs pale; punctures fine, close and asperulate, rather coarse, rounded, shallow and less close on the head, much less close and elongate-asperulate on the abdomen, the vestiture close, sparser on the head and abdomen; head transverse, three-fifths as wide as the prothorax, the eyes slightly convex and at nearly their own length from the base; antennæ pale throughout, short, stout, incrassate distally, the second joint not quite so long or stout as the first, a little longer than the third, fourth not as long as wide, tenth almost twice as wide as long, the last very large, rather swollen, subcylindric, obtusely ogival at tip, not obviously constricted medially and much longer than the two preceding; prothorax nearly two-thirds wider than long, subparallel, the sides very moderately arcuate, converging a little more apically, the base rounded; surface with a very faint transverse impression before the scutellum; elytra parallel, much shorter than wide, equal in width to the prothorax, the suture only very slightly longer, the apical sinuses evident; abdomen at base nearly as wide as the elytra, gradually slightly tapering with straight sides from base to the fifth tergite, which is less than one-half longer than the fourth. Length 2.0 mm.; width 0.53 mm. New York (Catskill Mts.).

A very distinct species, to be known by coloration, sculpture and particularly by its short stout antennæ, with the large last joint perceptibly thicker and swollen.

Group III.

This is the largest group of the genus. The two following are among the largest of our species and conform closely to *convergens* and *iowensis* Csy., in structure and facies.

Oxypoda profecta n. sp.—Stout, fusoid, rather convex, feebly shining, blackish-piceous, the elytra and legs pale luteous-brown; punctures minute and close-set throughout, the pubescence pale, rather long, abundant and only subdecumbent; head a little more than half as wide as the prothorax, slightly transverse, parallel and rounded at the sides, the eyes but very slightly prominent though well developed, with the facets larger and flatter posteriorly; antennæ moderately short, rather stout and conspicuously incrassate, blackish, gradually testaceous basally, the second joint as long as the first but thinner, only very slightly longer than the third, the fourth slightly longer than wide, the outer joints very moderately transverse, the last equal to the two preceding, gradually pointed from behind the middle, with an irregular constriction anteriorly on the inner side only; prothorax large, less than one-half wider than long, feebly inflated basally, with the sides there subangularly rounded, thence narrowed anteriorly, with very feebly arcuate sides, rounded at base, unimpressed; elytra parallel, slightly narrower than the prothorax, the suture barely as long as the latter, the apical sinuses distinct; abdomen at base not quite as wide as the elytra, gradually rather strongly tapering from base to apex the fifth tergite very much longer than the

fourth; basal joint of the hind tarsi much elongated. Length 3.5 mm. width 0.9 mm. Missouri (St. Louis).

Differs from either *convergens* or *iowensis* in the distinctly longer and more incrassate antennæ, though they are noticeably short relatively; it further differs from *iowensis* in its larger and much more transverse prothorax, and, from *convergens*, in the more angularly inflated basal parts of the latter.

Oxypoda manitobæ n. sp.—Form and coloration nearly as in the preceding, the elytra more obscure and faintly infumate broadly toward base and suture; apices of the tergites faintly palish; minute close punctures especially fine and dense on the abdomen, the vestiture fine and close; head three-fifths as wide as the prothorax, wider than long, parallel at the sides, the eyes more convex than in *profecta*, at their own length from the base and with the fine convex facets equal throughout; antennæ short, blackish, paler basally, rather slender and only moderately incrassate, the second and third joints long, subequal, each slightly longer than the first, the third rather longer than the second, fourth a little longer than wide, the outer joints moderately transverse and obtrapezoidal, the last as long as the two preceding, rather abruptly narrowed and flattened before the middle; prothorax nearly as in the preceding but more uniformly black and not paler toward the basal angles and less narrowed anteriorly; elytra similar though a little less transverse, the apical sinuses distinct, the suture distinctly longer than the prothorax; abdomen similar though less rapidly tapering, the fifth tergite not so long, three-fourths as wide as the first; posterior tarsi long and slender, the first joint not quite as long as the next three. Length 3.0 mm.; width 0.85 mm. Manitoba (Aweme),—Criddle.

Distinguishable at once from any one of the three species of this group previously mentioned by the less tapering and still more finely and densely punctate abdomen.

The following group of two species is remarkable and isolated because of the very small head, giving them a habitus immediately recognizable:

Oxypoda nimbata n. sp.—Strongly fusiform, rather convex, somewhat shining, dark piceous throughout, the legs pale; punctures rather strongly asperate and not dense, smaller and closer on the abdomen, the pubescence rather stiff and not so abundant as usual; head hardly half as wide as the prothorax, as long as wide, broadly arcuato-truncate at base, with distinct lateral angles, the eyes not prominent, at about their own length from the base; antennæ pale, short, slender basally, rather rapidly and somewhat strongly incrassate distally, the second and third joints long, subequal, each longer than the first, the third but little shorter than the second and as long as the next two combined, they being subequal and about as long as wide, the outer joints becoming rather strongly trans-

verse, the last gradually pointed and longer than the two preceding; prothorax well developed, one-half wider than long, rounded at the sides and subinflated basally, the sides thence strongly converging and more broadly arcuate to the greatly narrowed apex, the base rounded, unimpressed; elytra moderately transverse, parallel, almost fully as wide as the prothorax, the suture not distinctly longer, the apical sinuses distinct; abdomen at base very nearly as wide as the elytra, evenly and rapidly tapering to the rather acute apex, the fifth tergite scarcely three-fifths as wide as the first and almost as long as the preceding two combined; hind tarsi long and slender, the first joint as long as the next three. Length 1.85 mm.; width 0.55 mm. California (Sta. Cruz Mts.),—Harford.

Very easily known by the peculiar fusoid form, acute abdomen, rather less dense and coarser sculpture than usual, small head and by the antennal structure.

Oxypoda cernua n. sp.—Fusoid, pointed behind, moderately convex, feebly shining, the punctures as in the preceding but a little finer and closer, the vestiture moderately close and not very short; color dark rufo-piceous, the legs pale; head longer than wide, oval, rounded at base, not half as wide as the prothorax, the eyes not prominent and at rather more than their own length from the base; antennæ short, rather strongly incrassate, blackish, pale basally, the second joint slender, longer than the first and much longer than the third, the latter not as long as the next two together, they being unequal, the fourth slightly, the fifth strongly, transverse the tenth nearly twice as wide as long, the last obtuse and as long as the two preceding; prothorax well developed, one-half wider than long, widest at base, the sides thence strongly converging and strongly, evenly arcuate to the apex, the former broadly rounded, becoming feebly sinuate near the basal angles, which are very distinct and nearly right, the surface unimpressed; elytra as in the preceding but not quite so transverse and relatively larger, fully as wide as the prothorax, the suture fully a fourth longer; abdomen at base about as wide as the elytra, very strongly tapering with straight sides thence to the acute apex, the fifth tergite about half as wide as the base and one-half longer than the fourth; tarsi nearly similar. Length 2.2 mm.; width 0.58 mm. California (Arcata, Humboldt Co.).

Though allied to *nimbata*, this peculiar species may be distinguished from it at once by the rounded and not truncate base of the head, antennal structure, form of the prothorax and much more strongly tapering and more acute abdomen. In *nimbata* the basal angles of the prothorax are rather obtuse and blunt, the base near them not evidently sinuate.

The following is a peculiar minute species that may not be an *Oxypoda* at all:

Oxypoda madescans n. sp.—Small, parallel, shining, finely and asperulately but not densely punctate throughout, the pubescence rather

coarse, not close; color pale testaceous throughout, the abdomen feebly and indefinitely infumate near the fourth tergite; head large, fully three-fourths as wide as the prothorax, wider than long, parallel and rounded at the sides, the eyes small, obliquely oval, not convex, with fine isolated facets, at more than their own length from the base, the carinæ strong and entire; antennæ pale throughout, short, strongly incrassate, the second joint as long as the first, much longer than the third, which is about as long as the next two combined, the latter each transverse, the tenth about twice as wide as long, the last very short, subglobular, not longer than wide; prothorax scarcely a third wider than long, widest very near the base, the sides thence strongly converging and but slightly arcuate to the apex, the angles obtuse and blunt; base strongly rounded, unimpressed before the scutellum; elytra short, as wide as the prothorax, subparallel, the suture but little more than three-fourths as long as the latter, the apical sinuses extremely lateral, narrow and rather deep; abdomen about as wide as the elytra, parallel, the fifth tergite not quite so long as the third and fourth combined; hind tarsi not so elongate as usual though with the first joint as long as the next three. Length 1.4 mm.; width 0.35 mm. California (Monterey).

This species cannot be confounded with any other of the genus. I am not able to actually count the joints of the anterior tarsi in the single specimen at hand, but most of its general characters seem to indicate *Oxypoda* as a probably correct assignment for it.

The following is also a widely isolated form in the very short elytra:

Oxypoda subpolaris n. sp.—Stout, parallel, rather convex, black or piceous-black throughout, the legs pale brown; surface alutaceous, finely and closely but not densely punctate, the vestiture inconspicuous; head slightly transverse, three-fifths as wide as the prothorax, inflated basally, the eyes small, obliquely oval, somewhat convex, coarsely faceted and at twice their length from the base; antennæ blackish, moderately short, rather rapidly incrassate distally, the second joint as long as the first, evidently longer than the third, fourth fully as long as wide, fifth slightly transverse, the tenth one-half wider than long, the last stout, ogivally pointed and rather longer than the two preceding; prothorax large, convex, one-half wider than long, inflated and rounded at the sides basally, thence gradually narrowed with less arcuate sides to the apex, the base rounded with the angles very obtuse and rounded, the surface very feebly impressed on the median line behind the centre; elytra very short and transverse, parallel, distinctly narrower than the prothorax, the suture not more than three-fifths as long as the latter, the sinuses at apex broad and very shallow; abdomen nearly as wide as the elytra, parallel, with rather thick margins, the fifth tergite but little longer than the others; basal joint of the hind tarsi subequal to the next three. Length 2.0 mm.; width 0.68 mm. Alaska (Nome),—Fuchs.

To be known readily by its parallel stout form, black coloration and very short elytra.

The following six species are of moderately large size, pale coloration and have the abdominal punctures less dense, larger and in the form of elongate flat asperities; the previously described *obliqua*, *mimetica*, *virginica*, *truncatella*, *saxatilis* and *nubifer* belong to the same group:

Oxypoda wickhami n. sp.—Rather stout and convex, pale ochreotestaceous, the head piceous and the abdomen blackish, except at the apices of all the segments; surface alutaceous, the abdomen more shining, the punctures very fine, dense and asperulate, the abdominal asperities becoming of uneven size posteriorly and gradually coarser and sparser as usual, the pale vestiture dense and decumbent, less dense and longer on the abdomen, the legs pale; head transverse, more than half as wide as the prothorax, parallel, the eyes large but only slightly convex, with rather fine and dense convex facets, at only a short distance from the base; antennæ extending to the base of the prothorax, feebly incrassate, piceous, paler basally, the second joint slightly longer than first or third, which are subequal in length, the fourth about as long as wide, fifth slightly transverse, the tenth nearly one-half wider than long, the last as long as the two preceding, inflated in basal three-fifths but abruptly narrowed and pointed beyond the strong ambient constriction; prothorax large, one-half wider than long, widest behind the middle, the sides arcuate, more converging and less so anteriorly, the base evenly rounded, the angles obtuse, distinct, the surface unimpressed; elytra transverse, equal in length to the prothorax, a little narrower than the latter at base but as wide apically, the sides feebly arcuate, the apical sinuses deep; abdomen at base notably narrower than the elytra, very feebly tapering thence to the fifth tergite, which is more than three-fourths as wide as the base and a third longer than the fourth, the margins moderately thick. Length 3.0 mm.; width 0.75 mm. Utah (Provo),—H. F. Wickham.

This is one of our largest and most prominent species, recognizable at once by its size, coloration, large eyes, sculpture and other characters.

Oxypoda recensa n. sp.—Nearly as in the preceding in form, coloration and sculpture but smaller, the similarly transverse head inflated slightly basally and with the eyes less developed and at fully one-half of their own length from the base, the antennæ blackish, paler and thin basally, more rapidly incrassate distally than in the preceding, fully as long (♂) but short and thinner (♀), the second and third joints long and slender, each longer than the first and but slightly unequal, fourth quadrate, tenth slightly transverse, shorter in the female, the last a little longer than the two preceding, not inflated basally, more evenly oval and gradually pointed, the ante-median stricture very feeble; prothorax similar but less transverse, less narrowed anteriorly, the sides more evenly arcuate and less so basally than in *wickhami*, the surface sometimes having a very

feeble transverse ante-scutellar impression; elytra parallel, fully as wide as any part of the prothorax, the suture a fifth longer than the latter; abdomen at base distinctly narrower than the elytra though not so markedly so as in the preceding, nearly similar otherwise throughout. Length 2.8 mm.; width 0.68–0.73 mm. California (Lake Tahoe).

Distinguishable from the preceding by its smaller size, slightly narrower form, smaller eyes, differences in the last antennal joint and in its longer elytra.

Oxypoda juncea n. sp.—Much more slender, moderately convex, slightly shining, the abdomen more opaque, the asperities there of the same general form but smaller, closer and more uniform throughout, almost as small and dense throughout the apical part as basally; color dark piceous, the head blackish, the abdomen black with pale segmental apices, the pale rufous elytra blackish toward the suture, more broadly so basally; head only slightly wider than long, just visibly inflated basally, the eyes slightly convex, at not quite their own length from the base, with the dense convex facets fine anteriorly, gradually coarser posteriorly; antennæ piceous-black, paler basally, rather slender, gradually feebly incrassate, the third joint but little shorter than the second, fourth slightly longer than wide, the tenth two-fifths wider than long. the last long. slender, ogivally pointed, longer than the two preceding, the feeble constriction rather behind the middle and outlining a basal part exactly similar in form to the tenth joint; prothorax fully one-half wider than long, widest at about the evenly rounded base, the sides thence distinctly converging and evenly arcuate to the apex, the basal angles obtuse and slightly rounded; elytra but slightly transverse, fully as wide as the prothorax, the suture a third longer, the sides parallel, evenly and distinctly arcuate, the apical sinuses distinct; abdomen notably narrower than the elytra, long and unusually slender, almost perfectly parallel, the margins relatively rather thick, the fifth tergite one-half longer than the fourth. Length (extended) 3.2 mm.; width 0.65 mm. New Mexico (Gallup),—Wickham.

Easily separable from the two preceding by its narrower and much more slender form, narrow subparallel abdomen, longer elytra and structure of the eyes and antennæ.

Oxypoda canora n. sp.—Moderately slender and convex, ochreous, the head and the abdomen, excepting the segmental apices, black or nearly so, feebly shining, the abdomen rather notably, the asperities strong, not dense, sparser and feebler posteriorly; head well developed, slightly transverse, fully three-fifths as wide as the prothorax, but little swollen basally, the eyes at evidently less than their own length from the base; antennæ short, moderately incrassate, dusky-flavate, paler basally, the third joint much shorter than the second, the outer joints very moderately transverse, the last as long as the two preceding; prothorax one-half wider than long, widest near the obtusely blunt

basal angles, the sides thence rather strongly converging and arcuate to the narrowed apex, the base rounded; elytra very moderately transverse, fully as wide as the prothorax, the suture a fifth longer, parallel, the apical sinuses feeble and shallow; abdomen evidently narrower than the elytra, rather slender and subparallel, the margins not noticeably thick, the fifth tergite nearly one-half longer than the fourth. Length 2.5–2.65 mm.; width 0.5–0.6 mm. New York (Catskill Mts.).

Allied rather closely to *obliqua*, from Norfolk, Va., but with the head relatively not so large and the antennæ smaller, less incrassate distally and paler; the abdomen is relatively a little more slender and less thickly margined and the apical sinuses of the elytra much shallower.

Oxypoda latebricola n. sp.—Similar in coloration and sculpture to the preceding and with the same strong and conspicuous abdominal sculpture, but much stouter in form of body and more parallel; head similar in form and size, the eyes at less than their own length from the base, flatter and unusually coarsely faceted; antennæ slightly more developed but of the same general structure, the constriction of the last joint feeble and a little behind the middle; prothorax well developed, not so short, widest less basally but otherwise nearly similar; elytra similar in form but relatively narrower, evidently not as wide as the prothorax, the suture about a fifth longer than the latter, the apical sinuses rather deep and distinct; abdomen broader and much more thickly margined, not distinctly narrower than the elytra, subparallel, the fifth tergite but slightly narrower and a third longer than the others; hind tarsi moderate in length, the basal joint, as usual in this group of species, being not longer than the next two combined. Length 2.4 mm.; width 0.63 mm. Pennsylvania (near Philadelphia).

Distinguishable from the preceding by its more inflated prothorax, broader and more strongly margined abdomen and deeper apical sinuses of the elytra; the abdomen is still broader and a little more heavily margined than in *obliqua* and the fifth abdominal tergite is relatively shorter and broader than in either of those species.

Oxypoda congesta n. sp.—Very stout, moderately convex, subparallel, very feebly shining, the punctures minute, dense, asperulate, the abdominal sculpture as in the preceding; color dark blackish-brown, the head and most of the abdomen more nearly black; vestiture rather long, palish, abundant; head fully three-fifths as wide as the prothorax, transverse, the sides short and parallel, the eyes not prominent, at two-thirds their length from the base; antennæ black, the three basal joints dark testaceous, rather thick, distinctly incrassate, the first joint fully as long as the second and thicker, the third much shorter, fourth as long as wide, fifth larger and decidedly transverse, tenth one-half wider than long, the last as long as the two preceding, gradually pointed, the con-

striction at the middle; prothorax rather more than one-half wider than long, widest behind the middle, the sides evenly arcuate, moderately converging anteriorly, the base broadly rounded, subsinuate near the angles, which are obtuse and blunt; elytra moderately transverse, as wide as the prothorax, though basally a little narrower, the suture equal in length to the pronotum, the apical sinuses distinct; abdomen broad, at base but slightly narrower than the elytra, thence tapering very slightly, the fifth tergite nearly four-fifths as wide as the base, a third longer than the fourth; margins notably thick. Length 2.5 mm.; width 0.73 mm. California (Siskiyou Co.).

To be identified very readily in the present group,—having coarser asperate abdominal sculpture—by its stout form, dark coloration and thick abdominal margins.

The following five species belong to the same group as the preceding six, having similar coarse asperate abdominal sculpture, but they are decidedly smaller, and, as a rule, more slender; they are always in great part pale in color, live in rather solitary fashion in mouldy earth and are numerous and difficult to define recognizably; those described hitherto are *nigriceps*, from Rhode Island, and *simulans* and *perexilis*, from St. Louis, Missouri; as a group they belong to the fauna of the Atlantic States exclusively:

Oxypoda oblita n. sp.—Much stouter than any of the others in this group, the head and abdomen blackish, the latter broadly and indefinitely paler basally and at apex, the prothorax and legs pale flavo-testaceous, the elytra darker, piceo-testaceous; punctures fine and dense, those of the abdomen smaller, closer and more feebly asperate than usual, the pale vestiture distinct, close; head three-fifths as wide as the prothorax, inflated at base, much shorter than wide, the eyes rather prominent but small, at more than their own length from the base; antennæ blackish, rather stout and moderately incrassate beyond the fourth joint, paler basally, the third joint much shorter and rather thinner than the second, fourth fully as long as wide, outer joints short, strongly transverse, the tenth more than one-half wider than long, the last unusually short, one-half longer than wide, as long as the preceding two, very obtusely ogival at tip, having a feeble remnant of the constriction at the middle of the inner side only; prothorax short, fully three-fifths wider than long, widest behind the middle, the sides rounded, less so and moderately converging anteriorly, the base evenly rounded, the angles obtuse and blunt; elytra transverse, very slightly narrower than the prothorax, the suture equal in length to the latter, the apical sinuses distinct; abdomen at base nearly as wide as the elytra, thence distinctly tapering, with feebly arcuate sides and fine acute margins, the fifth tergite three-fourths as wide as the base and more than one-half longer than the fourth. Length 1.9–2.2 mm.; width 0.48–0.5 mm. Mississippi (Vicksburg).

An exceptional species, in the present restricted group, in its stouter form, finely margined, tapering and more densely sculptured abdomen and many other structural features.

Oxypoda affecta n. sp.—Very slender as in *perexilis;* coloration and sculpture nearly as in the preceding, except that the head and all the abdomen, except the fine segmental apices, are paler piceous; head well developed, nearly two-thirds as wide as the prothorax, a little wider than long, feebly inflated basally, the eyes not prominent and at their own length from the base; antennæ short, rather slender, only feebly incrassate, blackish, paler basally, the third joint much shorter than the second, fourth fully as long as wide, the outer joints strongly obtrapezoidal, fully one-half wider than long, the last unusually small, not longer than the two preceding and not at all inflated; prothorax relatively large, two-fifths wider than long, the sides very feebly converging and subevenly and rather feebly arcuate from the obtuse and blunt basal angles to the apex, the base rounded, the surface unimpressed; elytra small, parallel, narrower than the prothorax, the suture distinctly shorter than the latter, the apical sinuses well developed; abdomen narrow, slender and subparallel, the very feeble even taper almost unobservable, slightly narrower than the elytra, the margins not notably thick, the fifth tergite very long, more than one-half longer than the fourth. Length 2.2 mm.; width 0.4 mm. Mississippi (Vicksburg).

Allied to *perexilis* but differing in its much larger head, more slender and less incrassate antennæ, with a much smaller, less stout and less constricted terminal joint; also in its relatively broader prothorax, with less rounded sides.

Oxypoda tenuicula n. sp.—Not quite so slender as the preceding and *pertenuis* and with much more anteriorly narrowed prothorax, nearly similar in coloration, sculpture and vestiture, the abdominal asperities rather finer, closer and more uniform than usual though strong; head moderate, subtriangular, wider than long, the eyes moderate; antennæ longer than in the preceding, gradually moderately incrassate, infuscate, paler basally, the third joint much shorter than the second, fourth rather longer than wide, the fifth slightly transverse, the tenth less than one-half wider than long, the last fully as long as the preceding two, abruptly narrowed and compressed apically; prothorax large, inflated basally and widest behind the middle, the sides rounded, strongly converging and less so anteriorly, one-half wider than long, with rounded base as usual; elytra perfectly parallel, only moderately transverse, much narrower than the prothorax, the suture equal in length to the latter; abdomen narrow and slender, evidently narrower than the elytra, only just visibly tapering, with straight sides and moderate margins, to the fifth tergite, which is rather more than one-half longer than the fourth. Length 1.8–2.2 mm.; width 0.38–0.45 mm. Iowa (Iowa City and Cedar Rapids).

Distinguishable from any other form in its vicinity by the more developed and less abbreviated antennæ, very large, strongly anteriorly narrowed prothorax, narrow elytra and other characters.

Oxypoda croceola n. sp.—Ochreo-testaceous, the elytra darker, the head piceous, the abdomen indefinitely clouded except basally and near the apex, the legs pale; sculpture and vestiture nearly as in the preceding; head three-fifths as wide as the prothorax, wider than long, only feebly inflated basally, the eyes not prominent, coarsely faceted and at less than their own length from the base; antennæ dusky, paler basally, short, moderately and gradually incrassate, of the same general structure as in other species of this group, the first and third joints equal in length and evidently shorter than the second, the fourth as long as wide, tenth two-fifths wider than long, the last very obtuse at tip; prothorax rather large, moderately transverse, convex, the sides converging and moderately arcuate from the obtuse basal angles to the apex, the base evenly rounded; elytra well developed, rather transverse, as wide as the prothorax, the suture about as long as the latter, the apical sinuses deep; abdomen slender, much narrower than the elytra, parallel, narrowing slightly near the apex, the margins not thick, the fifth tergite long. Length 2.0–2.1 mm.; width 0.43–0.46 mm. Missouri (St. Louis) and Texas (Houston).

Stouter, with more anteriorly narrowed prothorax and wider elytra than the neighboring species and with the abdominal asperities unusually small and dense; the sixth ventral plate in the type is transversely truncate at tip, with rounded angles.

Oxypoda mollicula n. sp.—Moderately slender, colored and sculptured as in the preceding, except that the abdominal asperities are larger and not so dense, the body narrower and more parallel; head similar though relatively larger, two-thirds as wide as the prothorax; antennæ short, pale, gradually distinctly incrassate, otherwise as in *croceola*, except that the fourth joint is not quite so long as wide, the outer joints shorter and more transverse and the last more pointed; prothorax moderate, shorter and more parallelogramic, fully one-half wider than long, the sides subparallel, evenly and distinctly arcuate, the base rounded; elytra moderate, rather short, parallel, only very slightly narrower than the prothorax, the suture four-fifths as long as the latter, the apical sinuses deep; abdomen slender, slightly narrower than the elytra, parallel, just visibly narrowing near the apex, the margins moderate, the fifth tergite long. Length 1.8–2.0 mm.; width 0.4–0.45 mm. North Carolina (Asheville).

The form of the rather short and parallel prothorax would seem to place this species in arbitrary group II, defined above, but the elytra are much more feebly developed than in that group and all its affinities are with *simulans*, *nigriceps* and others of this group, from which, however, the characters above noted distinguish it rather obviously.

In the following ten species the general facies is nearly as in the *wickhami–congesta* series, but the coloration is more frequently dark, and they differ radically besides in having the abdominal punctures much more minute, denser and never in the form of elongate asperities; the previously described *glenoræ* belongs to this series:

Oxypoda hiemalis n. sp.—Rather small, slender and convex, pale ochreo-testaceous, the elytra scarcely darker, the head pale piceous, the abdomen brown, feebly infumate except basally and at apex; punctures throughout very minute and close, the lustre dull, more shining on the anterior parts, the pale vestiture close, only moderately short; head but little more than half as wide as the prothorax, wider than long, the eyes coarsely faceted, not prominent, at nearly their own length from the base; antennæ pale piceo-testaceous, short, gradually moderately incrassate, the second joint as long as the next two combined, fourth as long as wide, tenth more than one-half wider than long, the last not inflated, rather longer than the two preceding, obtusely ogival at tip, the constriction vestigial and on the inner side only; prothorax large, convex, one-half wider than long, much narrowed at apex, with evenly arcuate sides, somewhat wider behind the middle than at base, the latter only feebly arcuate; elytra short and transverse, evidently narrower than the prothorax, the suture not more than three-fourths as long as the latter, the apical sinuses distinct; abdomen almost as wide as the elytra, parallel, narrowing slightly toward tip, the margins rather thin, the fifth tergite one-half longer than the fourth; basal joint of the hind tarsi longer than the next two combined. Length 1.8 mm.; width 0.45 mm. Canada (Ottawa),—Harrington.

Distinct in general form and coloration, in its short elytra, large prothorax and other features.

Oxypoda elusa n. sp.—General form as in *hiemalis*, the pale parts darker brown, the abdomen brown-black, paler apically; punctures fine, only moderately close, asperate, especially on the elytra, extremely fine and dense throughout the abdomen, the vestiture pale, short, close; head slightly more than half as wide as the prothorax, the obliquely oval eyes feebly convex, at less than their own length from the base, the facets rather small and not in mutual contact; antennæ not so short and rather heavier than in the preceding, blackish, pale basally, the second joint longer than the third but not as long as the next two, tenth less transverse, the last larger, almost as long as the preceding three, constricted beyond the middle, the basal part inflated and thicker than the preceding joints; prothorax nearly as in the preceding though relatively not so large and a little shorter; elytra not so short, slightly narrower than the prothorax, parallel, the suture four-fifths as long as the pronotum, the apical sinuses distinct; abdomen at base as wide as the elytra, thence very feebly tapering and with nearly straight sides to the fifth tergite,

which is not quite so long as in the preceding species, the lateral margins somewhat thicker. Length 2.28 mm.; width 0.5 mm. California (Truckee).

This species resembles the preceding almost exactly in general facies but is darker in coloration, with shorter prothorax, longer elytra, feebly tapering abdomen and especially with different antennal structure, the inflated last joint not being indicated at all in *hiemalis*.

Oxypoda profuga n. sp.—Moderately stout, convex anteriorly, piceous-black in color, the prothorax and abdominal tip faintly paler and more rufescent, the legs pale; punctures very fine, asperulate, rather closer on the pronotum than on the elytra and quite as strong, close and very fine on the abdomen, the vestiture not very conspicuous; head but slightly wider than long, subtriangular, convex, scarcely more than half as wide as the prothorax; antennæ dark, the basal joint paler, the third slightly shorter than the second, fourth as long as wide, tenth one-half wider than long, the last elongate, ogivally pointed, almost as long as the preceding three (♂), shorter (♀); prothorax large, convex, fully one-half wider than long, only moderately narrowed at apex, the sides evenly arcuate, widest behind the middle, the base broadly arcuate, becoming feebly subsinuate laterally, the surface unimpressed medially at base; elytra rather strongly transverse, evidently narrower than the prothorax, the suture four-fifths as long as the latter, the apical sinuses distinct; abdomen at base slightly narrower than the elytra, parallel basally, slightly narrowing apically, the fifth tergite only moderately long, the margins rather thick. Length 2.25 mm.; width 0.58 mm. California (coast region from San Francisco to Mendocino). Abundant.

One of the characteristic coast species; there is considerable sexual difference in the development and apical conformation of the antennæ.

Oxypoda flebilis n. sp.—Similar to the preceding in coloration and sculpture but more slender and slightly smaller, the fine punctures of the abdomen slightly larger and more separated basally, becoming extremely fine and dense on the posterior tergites—a rule exactly the reverse of that prevailing in the *wickhami* group preceding; head as in *profuga* but relatively larger, three-fifths as wide as the prothorax, the antennæ (♂) similar though rather more rapidly and strongly incrassate distally, the third joint relatively shorter, the eleventh more constricted near the middle, with the basal part more swollen and thicker than the preceding joints, not quite as long as the three preceding; prothorax similar but narrower and less transverse, somewhat more narrowed anteriorly; elytra parallel, relatively narrower and more elongate, distinctly narrower than the prothorax, the suture somewhat longer than the latter, impressed near the scutellum, the apical sinuses rather deep; abdomen nearly as wide as the elytra though rather slender, parallel basally, with

rather thick margins, gradually and feebly, arcuately tapering posteriorly, the fifth tergite long. Length 2.1 mm.; width 0.5 mm. California (Truckee and Lake Tahoe).

Closely allied to *profuga* but narrower and slightly smaller and differing besides in the more incrassate antennæ, with more swollen apical joint and in the longer, narrower elytra.

Oxypoda optiva n. sp.—Somewhat stout and convex, slightly shining, the punctures very fine and not very dense, well separated even on the posterior parts of the abdomen; color dark piceo-rufous, the head darker and the abdomen black, except apically, the vestiture palish and distinct; head but little wider than long, slightly more than half as wide as the prothorax, the sides parallel and broadly rounded, the eyes at a little less than their own length from the base; antennæ gradually incrassate and fuscous, paler basally, of the usual structure, the last joint (♂) strongly constricted and narrowed beyond the middle, the basal part however not noticeably swollen, longer than the two preceding; prothorax large, nearly as in the preceding and more narrowed at apex than in *profuga*, the base evenly, moderately rounded throughout; elytra rather transverse, evidently narrower than the prothorax, apparently somewhat narrower at apex than at base, the apical sinuses deep, the suture slightly shorter than the pronotum; abdomen at base but little narrower than the elytral apex, parallel and with thick margins basally, almost imperceptibly narrowed apically, the fifth tergite, as well as the entire abdomen, relatively wider than in either of the two preceding. Length 2.25 mm.; width 0.62 mm. Vancouver Island (Victoria).

This is also closely allied to *profuga* but is stouter, paler in color, rather more loosely punctulate and with more developed elytra.

Oxypoda lassula n. sp.—Subparallel, moderately convex, somewhat shining, piceous-black throughout, the legs paler, piceous; punctures fine, asperulate, finer and denser on the abdomen, the vestiture short and close but infuscate; head rather small, only little more than half as wide as the prothorax, slightly wider than long, parallel and rounded at the sides, the coarsely faceted eyes at more than their own length from the base; antennæ piceous-brown throughout, short, slender, only feebly incrassate, the short hairs not dense and rather coarse, the second joint longer than first or third, fourth about as long as wide, the tenth slightly transverse, the last as long as the two preceding, compressed at tip; prothorax nearly three-fifths wider than long, slightly wider before than at the base, the sides almost evenly arcuate, rapidly converging anteriorly, the base broadly arcuate, the angles slightly obtuse though distinct; elytra but slightly transverse, parallel, as wide as the prothorax, the suture fully as long as the latter; abdomen at base evidently narrower than the elytra, slightly tapering thence to the fifth tergite, which is not very long, one-half longer than the fourth; sides straight, the margins rather thin. Length 2.3–2.5 mm.; width 0.58 mm. Washington State (Spokane) and British Columbia (Stikine River),—Wickham.

Recognizable by its dark coloration, rather narrow form, feeble antennæ, well developed elytra for the present group and other characters as stated.

Oxypoda egestosa n. sp.—Slender, dark piceous-brown to blackish throughout, the prothorax always somewhat the palest somite as usual, feebly shining, the sculpture as in the preceding, the vestiture paler and more evident; head nearly similar but relatively somewhat larger and more inflated basally, the eyes slightly larger; antennæ nearly similar, the last joint slender, longer than the two preceding and with a distinct median constriction; prothorax similar and convex, but not quite so short and decidedly less transverse, slightly less narrowed apically; elytra less developed, narrower and less transverse, parallel, evidently narrower than the prothorax, the suture slightly shorter than the latter, the apical sinuses distinct; abdomen narrower and more slender but otherwise similar, slightly narrower than the elytra and likewise feebly, evenly tapering, with straight sides but with thicker lateral margins and more elongate fifth tergite, this being about as long as wide and not transverse as it is in *lassula*. Length 2.7 mm.; width 0.53 mm. Vancouver Island (Victoria),—Wickham.

Distinct from *lassula* in its paler coloration, more slender form and relatively less developed elytra among other characters. The hind tarsi are long and very slender, with the basal joint fully as long as the next three.

Oxypoda famula n. sp.—Rather stout, convex and shining, dark piceous-brown, the head and most of the abdomen blackish; punctures minute and not at all dense anteriorly and on the abdomen, slightly larger, closer and asperulate on the elytra, the vestiture rather long, palish and distinct; head large, convex, fully two-thirds as wide as the prothorax, almost as long as wide, the eyes rather small, with the small facets isolated; antennæ short, gradually strongly incrassate, thick and darker distally, the second joint equal in length to the first and scarcely more slender, much longer than the third, the fourth shorter than wide, tenth fully three-fourths wider than long, the last short, ogival, but little longer than wide and as long as the two preceding; prothorax only moderately transverse, rounded at base, the sides from the obtuse and blunt basal angles only very feebly convergent and but slightly arcuate to the apex, where they are slightly rounded; elytra short, fully as wide as the prothorax or wider, parallel, the suture barely as long as the pronotum, the apical sinuses deep and somewhat narrower than usual; abdomen wide, almost as wide as the elytra, very feebly tapering and with somewhat arcuate sides to the fifth tergite, which is transverse though nearly one-half longer than the fourth. Length 1.75 mm.; width 0.55 mm. Queen Charlotte Islands (Massett),—Keen.

A small species, very distinct in sculpture and antennal structure; if it were not for the short elytra it might better go in Group IV.

Oxypoda paganica n. sp.—Stout, rather convex, tapering behind, slightly shining, pale piceous-brown, the head slightly darker, the abdomen blackish except apically; punctures very fine throughout, not dense except on the abdomen, the vestiture distinct, palish, not dense anteriorly; head scarcely more than half as wide as the prothorax, fully as long as wide, parallel and rounded at the sides, the eyes at nearly their own length from the base; antennæ short, rather pale throughout, gradually distinctly incrassate distally, of the usual structure, the outer joints rather strongly transverse, the last obtusely ogival at tip and longer than the two preceding; prothorax large and convex, one-half wider than long, widest at about the base, the sides evenly arcuate, gradually strongly converging anteriorly, the base broadly arcuate; elytra well developed, very moderately transverse, parallel, as wide as the prothorax, the suture equal in length to the latter, the apical sinuses notably deep; abdomen at base scarcely narrower than the elytra, gradually rather strongly tapering and with nearly straight sides thence to the fifth tergite, which is three-fifths as wide as the base and transverse; margins not thick. Length 1.8 mm.; width 0.6 mm. California (Pomona Mts., Los Angeles Co.),—Fall.

To be known readily by its stout and posteriorly tapering form, coloration, well developed elytra, oval and narrow head and other characters.

Oxypoda nutricia n. sp.—Nearly as in the preceding though a little less stout and darker in color, very dark blackish-brown, the legs and antennæ paler, the sculpture of the anterior somites, and especially the pronotum, notably coarser and rougher; head distinctly wider than long and evidently more than half as wide as the prothorax, the antennæ nearly similar, the second joint almost as long as the next two combined, fourth fully as long as wide; prothorax and elytra throughout almost as in *paganica*, the former a little less, the latter rather more, transverse, with the suture somewhat shorter than the pronotum; abdomen similar throughout though with thicker side margins. Length 1.6 mm.; width 0.5 mm. California (Sta. Cruz Mts.),—Harford.

Very close to the preceding and perhaps only a subspecies, but it is not so stout, darker in coloration, more coarsely sculptured and has a larger and notably more transverse head. In both the hind tarsi are very long and slender, with the much elongated first joint not quite equal to the next three.

Group IV.

The only distinguishing feature of this group, when compared with the preceding, is the greater development of the elytra and corresponding diminution of the prothorax, so that the sides of

the latter are generally in approximate continuation of the sides of the former; otherwise there is no difference and the group is purely arbitrary. Among the species already described, the group is represented by *amica*, found abundantly by Dr. Brendel at Cedar Rapids, Iowa, and *ancilla* Csy., a name subsequently changed, first to *dubia*, by Fenyes, and shortly afterward to *caseyi* by Bernhauer.

The following species is the largest of this group now known and has the abdominal sculpture even and not very asperate:

Oxypoda gymnica n. sp.—Rather stout, subparallel, convex and subalutaceous, piceous-black, the elytra but slightly paler, the legs piceous-brown; punctures fine, somewhat close, rather strong and asperate on the elytra, very fine, close and even though only slightly asperate on the abdomen; pubescence moderately short, palish; head only slightly wider than long, but little more than one-half as wide as the prothorax, parallel and subevenly rounded at the sides, the eyes barely at all prominent and at rather more than their own length from the base, the carinæ distinct, entire; antennæ black, not distinctly paler basally, a little longer than the head and prothorax, the third joint shorter than the second, fourth obtrapezoidal, not quite as long as wide, not much wider than the third, fifth and following rather abruptly wider, forming a noticeably stout and parallel section, in which the joints pass from strongly to feebly obtrapezoidal and from slightly to rather strongly transverse, the tenth a little longer than the ninth, the last distinctly shorter than the two preceding; prothorax fully one-half wider than long, the sides strongly converging and broadly rounded from base to apex, becoming subparallel basally, convex, with a feeble ante-scutellar impression; elytra large, slightly shorter than wide, subparallel, at base fully as wide as the prothorax, the suture a third longer, the apices moderately sinuate laterally; abdomen nearly parallel, with straight sides, distinctly narrower than the elytra, narrowing slightly posteriorly but only through the fifth tergite, which is a fourth longer than the fourth. Length 2.68–2.8 mm.; width 0.65–0.73 mm. Arizona (Williams), —Wickham.

Very distinct from any of the following species in its stouter form and parallel abdomen.

In the following five species the abdominal sculpture is as in the *wickhami–nigriceps* group preceding; that is, comparatively coarsely asperate, the punctures coarser, more longitudinal and sparser apically:

Oxypoda sedula n. sp.—Rather slender, dark piceous-brown, the pronotum and abdominal apex paler and more ochreous; punctures minute, close, slightly asperulate on the elytra, coarser and less close on the abdomen, especially toward tip; lustre anteriorly alutaceous, the

pubescence pale, abundant and distinct; head wider than long, fully three-fifths as wide as the prothorax, subparallel and feebly rounded at the sides, the eyes moderately large; antennæ short and slender, only slightly incrassate and infumate, paler basally, the third joint only a little shorter than the second, the outer joints very moderately transverse, the last small, pointed beyond the middle and not quite as long as the two preceding; prothorax about one-half wider than long, the sides strongly converging and only moderately arcuate from the very obtuse and blunt basal angles to the apex, the base rounded, the surface with a very feeble ante-scutellar impression; elytra large, but very little shorter than wide, not quite parallel, at base equal in width to the prothorax, the suture fully a third longer, the apical sinuses distinct; abdomen rather slender, distinctly narrower than the elytra, parallel, tapering slightly toward apex, the fifth tergite moderately transverse, one-half longer than the fourth; side margins not noticeably thick. Length 1.9–2.7 mm.; width 0.46–0.58 mm. Arizona (Tucson).

A slender form, varying remarkably in the size of the body and having large elytra, a comparatively small prothorax, well developed head and short, slender antennæ.

Oxypoda lenis n. sp.—Still more slender, more parallel and more shining, similar in coloration, the punctures less dense, more strongly asperulate and, toward the abdominal apex, becoming very remote on the fifth tergite—two or three times as sparse as in *sedula;* head relatively still larger, nearly three-fourths as wide as the prothorax, inflated slightly at base, wider than long, the eyes larger, more convex and at but little more than half their length from the base, the antennæ nearly similar though having the second joint much longer than the first or third; prothorax still smaller and shorter, more than one-half wider than long, the sides strongly rounded basally, thence strongly converging and nearly straight to the apex, the base rounded, the angles obtuse and broadly rounded, the surface not noticeably impressed; elytra parallel, with feebly arcuate sides, about as long as wide, fully as wide as the prothorax or wider, the suture nearly one-half longer, the apical sinuses broader than in the preceding; abdomen much narrower and more parallel, the fifth tergite only just visibly narrower than those preceding, relatively shorter than in *sedula*, the side margins still thinner. Length 2.4 mm.; width 0.52 mm. New Mexico (Coolidge),—Wickham.

Though related more particularly to the preceding, this species may be separated readily by the larger head and eyes, shorter prothorax, more rounded at the sides basally, longer elytra and narrower, more parallel abdomen, the latter being much more remotely punctate apically.

Oxypoda agitata n. sp.—Much stouter than either of the two preceding, rather shining, the abdominal asperities dense throughout, moderately dense on the elytra; pubescence pale, rather close, coarser

and darker on the abdomen; color rather pale flavate-brown, the pronotum more piceous, the head black, the elytra pale, with the flanks apically and sutural region basally broadly darker, the abdomen nearly black, the apices of the segments pale, broadly so apically; head three-fifths as wide as the prothorax, wider than long, subparallel, the eyes moderate; antennæ longer than in the preceding, slender, very feebly and gradually incrassate, the second joint scarcely longer than the first but distinctly longer than the third, the outer joints but little wider than long, the last slender, cylindric, gradually obtusely pointed apically, and rather longer than the two preceding; prothorax in form and proportion nearly as in *sedula*, the ante-scutellar impression rather larger, more rounded and distinct; elytra slightly shorter than wide, at base fully as wide as the prothorax, the suture about a third longer, the apical sinuses strong and distinct; abdomen relatively narrow, almost perfectly parallel and with straight sides, the margins moderate, the fifth tergite as in the preceding. Length 2.3 mm.; width 0.68 mm. Texas (El Paso), —found by Mr. Dunn and also by the writer.

Distinguishable at once from the two preceding by its broader form and by the coloration, also by the less abbreviated antennæ, with longer and more cylindric terminal joint.

Oxypoda astricta n. sp.—Very slender, subparallel, alutaceous, piceous-brown, the head darker, the abdomen blackish, with the segmental apices paler; punctures fine, dense and asperate throughout, the abdomen having strong imbricate sculpture which becomes longer feeble isolated asperities posteriorly, subobsolete toward apex of the fifth tergite; vestiture very short, close, sparser on the abdomen; head convex, wider than long, fully three-fifths as wide as the prothorax, parallel and rounded at the sides, the eyes not prominent and at but little more than half their length from the base; antennæ very short, slender, only feebly incrassate, piceous, testaceous basally, the second joint but little longer than the first or third, fourth distinctly wider than long, the outer joints slightly transverse, the last rather longer than the two preceding, cylindric, ogival at tip; prothorax one-half wider than long, rounded at base, the sides evenly arcuate, becoming strongly converging apically and parallel basally; elytra distinctly shorter than wide, parallel, fully as wide as the prothorax, the suture a fourth or fifth longer; abdomen but slightly narrower than the elytra, parallel, scarcely perceptibly narrowing apically, the fifth tergite more than one-half longer than the fourth, the side margins moderately thin. Length (greatly extended) 2.7 mm.; width 0.42 mm. California (Pomona, Los Angeles Co.),—Fall.

A very small slender species, to be identified readily by the above characters. The abdomen in the single type specimen at hand is so extended that it is nearly twice as long as the entire remainder of the body.

Oxypoda vetula n. sp.—Stout, subparallel, rather convex, feebly

shining, testaceous, the pronotum barely at all darker, the pale elytra postero-externally and toward the suture infumate, the head and abdomen black, the segmental apices feebly pale, the legs pale; punctures fine and dense, asperulate on the elytra, the abdominal asperities isolated and strong, becoming larger and sparser posteriorly; pubescence close, coarser and less close on the abdomen; head parallel, wider than long, fully three-fifths as wide as the prothorax, the eyes moderate, slightly convex and prominent; antennæ short, dark, paler basally, rather rapidly incrassate and stout apically, the second joint distinctly longer than the third, fourth as long as wide, the tenth rather strongly transverse, eleventh fully as long as the two preceding, obtusely pointed at tip; prothorax as in the preceding but relatively larger, unimpressed; elytra evidently though not greatly shorter than wide, subparallel, at base barely as wide as the prothorax, the suture about a fourth longer, the apical sinuses rather shallow; abdomen nearly as wide as the elytra, parallel throughout, the margins rather thick, very thin on the moderately long though transverse fifth tergite, giving the appearance of slight posterior narrowing; basal joint of the hind tarsi as long as the next two combined. Length 1.9–2.4 mm.; width 0.48–0.65 mm. New Jersey (Atlantic City).

Much stouter than the preceding and differing in numerous features; fully as stout as *agitata*, and with much more developed prothorax.

The remaining thirteen species here described, having less asperate though not necessarily denser abdominal sculpture, are divisible into a few rather feebly differentiated sections, which possibly may be recognized. The two following species are rather narrow, almost perfectly parallel and of very dark coloration, the elytra less developed than in most of those of Group IV:

Oxypoda morula n. sp.—Parallel, only moderately convex, dull, the abdomen more shining and with rather coarse, asperulately imbricate sculpture, the anterior parts throughout very densely punctate, the elytra more coarsely and roughly, the vestiture short and dense, sparser and longer on the abdomen; color piceous-black, the head and abdomen deep black, the legs dark brown; head triangular, widest at base, wider than long, nearly two-thirds as wide as the prothorax, the eyes at one-half more than their own length from the base, the infra-lateral carinæ wholly obsolete; antennæ short, rather slender, only feebly incrassate, dark piceous throughout, the basal joint somewhat longer than the second, the latter longer than the third, fourth not quite as long as wide, the outer joints strongly obtrapezoidal and rather transverse, the last obtuse at tip and not quite as long as the two preceding; prothorax nearly one-half wider than long, the sides evenly arcuate, converging but little more apically than basally, the base rounded, with the angles obtuse though distinct, the surface very finely and feebly impressed along

the median line and with a distinct rounded ante-scutellar impression; elytra rather transverse, with sides evidently diverging from base to apex, at base equal in width to the prothorax, the suture about a fifth longer, the apical sinuses rather broad and shallow though distinct; abdomen equal in width to the base, but narrower than the apex, of the elytra, perfectly parallel and with straight sides to the apex of the fifth tergite, the latter one-half longer than the fourth, the margins noticeably fine; basal joints of the hind tarsi diminishing in length gradually but somewhat rapidly. Length 2.1 mm.; width 0.52 mm. California (San Francisco).

I am by no means even partially convinced that this species is an *Oxypoda;* the joints of the anterior tarsi in the single type example are unobservable and the absence of infra-lateral cephalic carinæ, perfectly parallel abdomen and shorter basal joint of the hind tarsi are very exceptional characters for the genus *Oxypoda.*

Oxypoda opica n. sp.—Rather slender and only slightly convex, feebly shining, the abdomen but little more so and with very minute, feeble and well separated punctures thoughout, the punctures elsewhere fine, close and aperulate; color deep black, the elytra and abdominal apex faintly dark piceo-castaneous, the legs pale brownish-flavate; vestiture very short, close but inconspicuous; head rather large, slightly wider than long, feebly inflated at base, three-fourths as wide as the prothorax, the eyes at barely their own length from the base, the carinæ distinct as usual; antennæ moderate in length, very slender, scarcely at all incrassate, black, the basal joint rather longer than the second, which is barely at all longer than the third, the fourth and fifth each slightly longer than wide, the outer joints but very little wider than long, the last thin, gradually pointed, not quite as long as the two preceding; prothorax one-half wider than long, the sides rather strongly converging and only feebly arcuate from base to apex, the base rounded, the surface unimpressed; elytra transverse, much shorter than usual in this group, at base fully as wide as the prothorax, at apex a little wider, the suture equal in length to the pronotum, the apical sinuses broad and shallow; abdomen at base slightly narrower than the elytral base, parallel, narrowing slightly apically, the fifth tergite a third longer than the fourth; margins rather thin. Length 2.0 mm.; width 0.48 mm. California (Mt. Diablo).

This seems to be truly an *Oxypoda*, although I am unable to observe the tarsi; but it is slightly aberrant in some directions.

The following species is stout, rather convex, strongly tapering behind and limuliform:

Oxypoda mansueta n. sp.—Densely alutaceous throughout, pale red-brown, the pronotum slightly, the head much, darker, the abdomen blackish, paler at tip, the legs pale; punctures and pubescence very fine

and close, the punctures of the abdomen asperate though very fine and extremely dense throughout; head small, about half as wide as the prothorax, the eyes large, at much less than their own length from the base but not prominent; antennæ dark, paler and slender at base, short, evenly and rather rapidly incrassate distally, the second joint distinctly longer than the third, fourth slightly more, the fifth a little less, than as long as wide, the tenth moderately transverse, the last somewhat longer than the two preceding, rather acutely pointed; prothorax large, three-fifths wider than long, rounded at base, much narrowed at apex, the sides evenly and strongly arcuate throughout, becoming parallel basally, unimpressed; elytra large, slightly shorter than wide, parallel, fully as wide as the prothorax, the suture fully a third longer; abdomen rather slender, at base much narrower than the elytra, thence gradually somewhat strongly tapering to the fifth tergite, which at apex is scarcely three-fifths as wide as the first, the sides nearly straight, the margins not notably thick. Length 1.9 mm.; width 0.58 mm. California (San Francisco).

Easily recognizable by the stout, posteriorly tapering form, large elytra and fine dense sculpture.

The following seven species are about as stout as the preceding but taper much less posteriorly:

Oxypoda sejuncta n. sp.—Feebly fusoid, rather convex and unusually shining, deep black, the elytra blackish-piceous, the legs piceous; punctures throughout very fine and well separated, not different on the abdomen, the vestiture not dense, dusky and inconspicuous; head rather large, transverse, almost two-thirds as wide as the prothorax, just visibly inflated at base, the eyes moderately large; antennæ not very short and unusually slender, black, paler basally, the first three joints subequal, the second very slightly the longest, fourth as long as wide, the outer joints but just visibly wider than long, the last slender, pointed at tip and rather longer than the two preceding; prothorax relatively small, more than one-half wider than long, the sides very moderately converging and rather strongly, subevenly arcuate from the rounded base to the apex, the latter not much narrowed, the surface scarcely impressed; elytra large, about as long as wide, at base fully as wide as the prothorax, at apex wider, the suture two-fifths longer, impressed behind the scutellum; abdomen at base fully as wide as the prothorax, narrower than the elytral apex, subparallel, with broadly arcuate sides which become slightly converging apically, the margins strong, the fifth tergite one-half longer than the fourth; basal joint of the hind tarsi longer than the next two but shorter than the next three. Length 2.2 mm.; width 0.7 mm. California (Placer Co.).

Distinguishable very easily by its black coloration, dark vestiture, fine and well separated punctures, slender antennæ, well developed head and large elytra.

Oxypoda scæva n. sp.—Moderately stout and rather dull, dark piceous-brown throughout, the legs pale piceo-flavate; punctures very fine and scarcely at all asperate, well separated, similar but closer on the abdomen, the vestiture not very abundant or conspicuous, palish; head smaller than in the preceding, less transverse and more parallel, scarcely three-fifths as wide as the prothorax, the eyes smaller; antennæ shorter, slightly stouter and more evidently incrassate distally, blackish, the second joint distinctly longer than the first or third, the latter two equal, fourth not quite as long as wide, outer joints evidently wider than long, the ninth shorter than the tenth, the eleventh long, slender, cylindric, obtusely pointed at tip, longer than the two preceding, constricted feebly at apical third; prothorax nearly as in the preceding, except that the feebly converging sides are very much less arcuate and the feeble, transverse and somewhat binary ante-scutellar impression more evident; elytra large and similar but evidently a little shorter than wide, at base fully as wide as the prothorax, at apex wider, the suture less impressed basally and about two-fifths longer than the pronotum, the apical sinuses deep, somewhat narrow; abdomen much smaller than in *sejuncta*, narrower, at base not quite as wide as the prothorax, thence feebly and evenly tapering, with straight sides and thin margins, to the fifth tergite, which is four-fifths as wide as the first. Length 2.0 mm.; width 0.62 mm. Oregon (The Dalles),—Wickham.

To be separated with ease from the preceding by its smaller head, heavier antennæ, less rounded sides of the prothorax and by the smaller abdomen with straighter sides.

Oxypoda saturata n. sp.—Stout, somewhat fusoid and convex, rather shining, piceous-black, the elytra distinctly paler, infumate postero-laterally and on the suture basally, the legs piceous, paler distally; punctures fine, nearly as in the preceding throughout but stronger, closer and more asperate, except on the abdomen, the vestiture rather coarse and palish but not dense; head almost two-thirds as wide as the prothorax, transverse, the eyes large, rather convex, at about half their length from the base, the antennæ blackish throughout, somewhat slender, feebly incrassate distally, the first joint as long as the second and thicker, third shorter and more obconic, the fourth nearly as long as wide, obtrapezoidal, the outer joints of the same form, moderately transverse, the ninth shorter than the tenth, the last not longer than the two preceding, gradually pointed distally; prothorax larger than in the two preceding though nearly similar in form, except that the sides are more converging from base to apex, subevenly and distinctly arcuate, the surface with a rather large and rounded ante-scutellar pit; elytra large though still shorter and more transverse than in the preceding, at base fully as wide as the prothorax, the sides rather strongly diverging from the base, the suture a third longer than the prothorax, the sinuses deep; abdomen not quite as wide as the prothorax, much narrower than the elytra, parallel, scarcely at all narrowed apically, with nearly straight and moderately thin margins, the fifth tergite barely a third longer than the fourth;

tarsi as in *sejuncta*. Length 2.0–2.4 mm.; width 0.7–0.78 mm. Nevada (Reno) and California (Calaveras Co.).

This species may be distinguished from either of the two preceding by the larger eyes, shorter terminal and longer basal joint of the antennæ, relatively larger prothorax, with a deeper and rounded basal impression, shorter elytra and more parallel abdomen.

Oxypoda regressa n. sp.—Rather stout, convex and shining, more or less pale piceous-brown, the head and a very faint diffused abdominal cloud slightly darker; punctures of the pronotum very fine, sparse, of the elytra asperulate and less sparse, of the abdomen as close as those of the elytra but very fine, the vestiture palish, not close; head moderate, three-fifths as wide as the prothorax, slightly transverse, the eyes rather convex, at about their own length from the base; antennæ blackish, pale basally, short, feebly incrassate though somewhat thick distally, the first three joints subequal, the first thickest, the third slightly the shortest and obconical, fourth nearly as long as wide, subparallel, fifth to tenth transverse, obtrapezoidal and similar, increasing but slightly, the ninth and tenth mutually similar, the last small, ogivally pointed, not longer than the two preceding; prothorax short, two-thirds wider than long, the base and sides well rounded, the latter strongly converging from base to apex, the ante-scutellar impression very feeble and transverse; elytra large, slightly transverse, with diverging and nearly straight sides, at base exactly equal in width to the prothorax and closely fitted thereto, at apex slightly wider, the suture two-fifths longer; abdomen at base fully as wide as the prothorax, the sides just visibly converging and straight thence to the fifth tergite, which is more than four-fifths as wide as the first; hind tarsi shorter than in the preceding species, the basal joint not longer than the next two combined. Length 1.75 mm.; width 0.65 mm. Vancouver Island (Victoria),—Wickham.

Differs from the three preceding in its paler coloration, still sparser fine punctures, shorter antennæ, with more transverse joints and a smaller terminal joint and shorter tarsi.

Oxypoda perita n. sp.—Moderately stout, elongate-fusoid, distinctly shining, with very fine and widely separated punctures, the elytra less shining, with stronger and denser sculpture, the vestiture noticeably long, palish; color black, the elytra moderately pale castaneous, the abdomen rufescent apically, the legs pale brown; head three-fifths as wide as the prothorax, slightly transverse, the eyes moderate; antennæ pale brown throughout, rather thick, longer than in *regressa*, the first three joints long, subequal in thickness, the third the shortest, fourth distinctly transverse, the outer joints moderately transverse, the ninth shorter than the tenth, the last gradually pointed, as long as the two preceding; prothorax only one-half wider than long, convex, with a feeble transverse ante-scutellar impression, the sides converging and arcuate throughout, the base rounded; elytra only moderately transverse, evi-

dently a little shorter than wide, at base fully as wide as the prothorax and at apex only very little wider, the suture about a fourth longer; abdomen at base but just visibly narrower than the elytra, thence evenly and moderately tapering to the fifth tergite, which is barely three-fourths as wide as the first and much longer than in the preceding, the margins straight and not thick. Length 2.3 mm.; width 0.62 mm. California (Fisk's Mill, Sonoma Co.).

Easily differentiated from allied forms by the more tapering abdomen, which, however, is relatively much less pointed than in *mansueta* and by the less transverse fifth tergite; also in its paler and thicker antennæ and longer vestiture; the elytra are faintly clouded extero-posteriorly and toward the suture basally, the suture rather deeply impressed behind the scutellum.

Oxypoda neptis n. sp.—Small, rather stout, fusoid, evidently shining, pale piceous-brown, the head and abdomen blackish; punctures fine, asperulate, well separated, still finer but equally sparse on the abdomen; vestiture rather long, not dense, palish; head nearly as long as wide, but little more than half as wide as the prothorax, the eyes rather small, not at all prominent; antennæ short, blackish, pale basally, the first three joints only moderately elongate, the second but slightly the longest, fourth as long as wide, fifth to tenth mutually similar, increasing gradually but not greatly in size and fully one-half wider than long, the last relatively small, ogival, not longer than the two preceding; prothorax three-fifths wider than long, rounded at base, the sides strongly converging and but very feebly arcuate from base to apex, the ante-scutellar impression transverse and very feeble; elytra moderately transverse, distinctly shorter than wide, at base fully as wide as the prothorax, at apex much wider, the sides rather strongly diverging and nearly straight, the suture broadly impressed at the scutellum and about a fourth longer than the pronotum, the apical sinuses distinct; abdomen at base slightly narrower than the elytral base, thence feebly tapering, with nearly straight sides and moderately thick margins, to the fifth tergite, which is transverse and nearly twice as wide as long, Length 1.8 mm.; width 0.52 mm. Iowa (Iowa City),—Wickham.

Distinct in its small size, pale color, fusoid outline, small conical prothorax and other features.

Oxypoda nugax n. sp.—Stout, fusoid, moderately convex, shining, pale flavo-piceous, the head and an indefinite abdominal cloud darker, the legs pale; punctures fine, everywhere well separated, slightly less so and more asperate on the elytra, the pubescence rather short, not dense, pale; elytra a little darker in color than the pronotum and with a fine pale even apical margin; head fully three-fifths as wide as the prothorax, transverse, the eyes at less than their own length from the base; antennæ short, blackish distally, pale basally, rather slender, feebly incrassate, the first joint nearly as long as the second and scarcely thicker, the third

shorter, fourth as long as wide, fifth to tenth increasing in size but mutually similar in form and distinctly transverse, the last small, compressed apically, not longer than the two preceding; prothorax three-fifths wider than long, the sides strongly converging and not very arcuate from base to apex, the base rounded, the impression feeble and evanescent; elytra broad, rather strongly transverse, with diverging sides, at base fully as wide as the prothorax, the suture impressed at base and barely a fourth longer than the pronotum; abdomen much narrower than the elytra, distinctly though moderately and evenly tapering, with straight sides and thin margins, from base to apex, the fifth tergite transverse, barely one-half longer than the fourth; all the tergites paler at apex, the apical ones broadly. Length 1.65–1.85 mm.; width 0.58–0.65 mm. Mississippi (Vicksburg).

Belonging, with the preceding, rigorously to the *sejuncta* group, so well developed on the Pacific coast, but with much shorter elytra than in any of the other species and very well characterized also by the coloration of the body, and especially of the elytra.

The three following species are merely in continuation of the *sejuncta* group preceding, but they are smaller and very much more slender, being narrowly subfusiform. *Tenera*, of Bernhauer, belongs to this group but has a relatively smaller head, much smaller antennæ and less transverse prothorax than any here described, besides being rather less convex:

Oxypoda implicata n. sp.—Slender, rather convex, alutaceous, piceous-black, the prothorax, abdominal apex and apices of the basal tergites paler and obscure rufous; punctures small but close, strongly asperulate and equal on the pronotum and elytra, those of the abdomen finer but not closer, the pubescence short, abundant; head well developed, a little wider than long, fully three-fifths as wide as the prothorax, feebly dilated basally, the eyes rather convex, at a little less than their own length from the base; antennæ dark ochreous-brown, short, distinctly though moderately incrassate distally, the second joint slightly longer than first or third, fourth nearly as long as wide, the outer joints mutually similar in form, distinctly transverse, the last obtusely pointed, not longer than the two preceding; prothorax short, three-fifths wider than long, strongly rounded at base, the sides distinctly converging and very moderately arcuate from base to apex, unimpressed; elytra moderately transverse, the sides only feebly diverging and very slightly arcuate, at base fully as wide as the prothorax, the suture a fourth longer, impressed at the scutellum, the apical sinuses deep; abdomen slender, distinctly narrower than the elytra, just visibly tapering from base to the fifth tergite, which is only slightly transverse and one-half longer than the fourth; basal joint of the hind tarsi not as long as the next three. Length 1.75 mm.; width 0.45 mm. California (suburbs of San Francisco).

The slender, feebly subfusoid form and rather strong close punctures of both the pronotum and elytra, will serve to identify this species very readily.

Oxypoda lividula n. sp.—Form nearly as in the preceding but more uniformly dark piceous-brown, the abdomen blackish, except basally and apically; surface rather more shining, the punctures less close and rather coarser, more rugose on the elytra, very fine and well separated on the abdomen; head smaller, nearly as long as wide, slightly more than half as wide as the prothorax, the eyes nearly similar but less convex; antennæ blackish, slightly paler basally, rather short, distinctly and somewhat rapidly incrassate, the second joint but little longer than the first though rather longer than the next two combined, the fourth distinctly transverse, fourth to tenth increasing greatly in size but mutually subsimilar in form, the outer still more strongly transverse, the last large, obtusely rounded at tip and nearly as long as the three preceding; prothorax nearly similar, except that the moderately converging sides from base to apex are much more strongly arcuate and the color darker; elytra similar but more elongate, nearly as long as wide and paler in color, the suture a third longer than the prothorax; abdomen similar though not quite so slender and with still finer lateral margins, at base not so markedly narrower than the elytra. Length 1.73 mm.; width 0.43 mm. California (San Mateo Co.),—Baker.

Though evidently allied to the last, this species is distinguishable by its more uniform coloration, smaller head, more strongly and rapidly incrassate antennæ, with shorter fourth and very much longer and more cylindrical eleventh joint and by other features as stated above.

Oxypoda effeta n. sp.—Slender, fusoid and convex, rather shining, the head and abdomen black, the segmental apices and abdominal apex pale; prothorax piceo-testaceous, the elytra darker; punctures of the former fine, well separated and scarcely asperulate, those of the latter stronger though scarcely closer and evidently asperate, of the abdomen fine and close throughout, with the sculpture finely imbricate; pubescence fine, abundant; head but little wider than long, fully three-fifths as wide as the prothorax, the eyes rather small, slightly convex, at fully their own length from the base; antennæ piceous-brown throughout, rather strongly incrassate distally, the second joint not as long as the next two, the fourth nearly as long as wide, the outer joints about one-half wider than long, the last as long as the two preceding, obtuse and compressed at apex; prothorax not quite one-half wider than long, rounded at base, the sides moderately arcuate and converging from base to apex; elytra distinctly shorter than wide, the sides but feebly diverging and just visibly arcuate, at base fully as wide as the prothorax, the suture scarcely a fourth longer, the sinuses distinct; abdomen at base not evidently narrower than the elytra, thence slightly tapering to the fifth tergite, which is strongly

transverse and but little longer than the fourth, the side margins moderately thick. Length 1.6 mm.; width 0.46 mm. California (Pomona, Los Angeles Co.),—Fall.

Related rather closely to *implicata* and resembling it in coloration, in the well developed head and antennal structure; but the antennæ are slightly shorter, the prothorax much less transverse and with more arcuate sides and the abdomen is relatively much broader, with the fifth tergite distinctly shorter and more transverse,—making allowance for relative degree of exposure due to retractibility of the segments.

Soliusa Csy.

This genus is closely related to *Homœusa* Kr., but differs in having scarcely a vestige of the fine acutely impressed groove along the base of the first two tergites characterizing *Homœusa*, and furthermore has much smaller and more coarsely faceted eyes and materially shorter tarsi; it is founded upon a diminutive and rather narrow, hirsute species, with small and very prominent eyes, named *crinitula* by the writer (Journ. N. Y. Ent. Soc., VIII, 1900, p. 54). The following is another species of the genus:

Soliusa frosti n. sp.—Stout, limuliform, moderately shining and convex, blackish-piceous, the pronotum toward base and sides, the entire elytra and the abdominal apex pale piceo-flavate, the legs very pale; punctures fine, asperulate, well separated throughout, the pubescence rather long, coarse, pale, decumbent and not very dense; head short and strongly transverse, scarcely more than half as wide as the prothorax, the small anterior eyes convex and rather prominent; antennæ stout, extending to basal third of the elytra, gradually strongly incrassate, dark red-brown in color throughout, the first two joints subequal, the third slightly shorter, a third longer than wide, four to eight very short and transverse, increasing greatly in size, the latter twice as wide as long, the ninth and tenth mutually similar but only one-half wider than long, the last gradually, obtusely pointed, longer than the two preceding; prothorax twice as wide as long, the sides rounding and converging anteriorly, becoming parallel basally, the base broadly arcuate, becoming feebly sinuate laterally; elytra transverse, fully as wide as the prothorax, the suture about as long as the latter, the sides feebly rounding basally, the apices very broadly and feebly sinuate laterally; abdomen at base distinctly narrower than the elytra, thence rapidly and evenly tapering, with straight sides and moderate margins, to the fifth tergite, which is scarcely three-fifths as wide as the first and one-half longer than the fourth. Length 2.1 mm.; width 0.77 mm. Massachusetts (Framingham), —C. A. Frost.

Differs from *crinitula* in its longer antennæ, with shorter fourth but less transverse ninth and tenth joints, relatively smaller head, with slightly less prominent eyes, more transverse elytra, and in the larger and stouter, more closely punctate and more darkly colored body, with shorter and less bristling vestiture.

I am almost sure that this genus replaces *Homœusa* in America and that the latter does not occur here.

Isoglossa Csy.

To the single type of this genus, which is apparently confined to the southern Sierra regions of California, and which may be no more than a subgenus of *Ocalea*, I have to add another species as follows:

Isoglossa pellax n. sp.—Rather stout, feebly fusoid, convex, shining, piceous-brown, the head and entire abdomen black, the legs pale brown; punctures rather fine, well separated, the abdomen with very minute and dense, transversely wavy strigilation and very fine, notably sparse punctures, the punctures nowhere very asperate, slightly so on the elytra; vestiture rather long, palish, not dense, sparse on the abdomen; head well developed, scarcely wider than long, fully two-thirds as wide as the prothorax, parallel and feebly arcuate at the sides, the eyes not prominent, at a little less than their own length from the base; antennæ long, heavy, moderately incrassate, black, slightly pale basally, the second joint slightly shorter than first or third, the three much elongated, fourth rather longer than wide, the outer joints less than one-half wider than long, the last gradually acutely pointed, short, not as long as the two preceding; prothorax relatively rather small, scarcely one-half wider than long, subparallel, the sides evenly and rather strongly arcuate, the base rounded, the angles obtuse and ill-defined, the surface with a small feeble rounded ante-scutellar impression; elytra large, wider than long, subparallel, with very feebly arcuate sides and slightly exposed humeri, distinctly wider than the prothorax and nearly one-half longer, the apices rather deeply sinuate laterally; abdomen large though evidently narrower than the elytra, parallel, with feebly arcuate sides which are very slightly more converging apically, the margins rather thin, the fifth tergite a third longer than the fourth; basal joint of the hind tarsi not quite so long as the next three, the latter mutually equal. Length 2.8 mm.; width 0.8 mm. California (Tehachapi Pass),—Wickham.

Differs from *arcuata* in its darker coloration, less shining and less sparsely punctate and pubescent integuments, darker antennæ, with more transverse outer joints, much smaller and more feeble basal impression of the pronotum and less apically tapering abdomen.

Ocalea Erichs.

The species are narrower in build, with relatively smaller prothorax and longer and much more slender antennæ than in the preceding genus; to the species previously described, and, as occurring in North America wholly confined to the subasiatic fauna of our Pacific coast regions, the following may be added:

Ocalea agnita n. sp.—Moderately slender, rather convex, highly polished, the integuments without trace of minute ground sculpture, the punctures fine and rather sparse, a little closer and feebly asperate on the elytra, very sparse on the abdomen; pubescence rather coarse, dusky, not dense, sparse on the abdomen; color dark piceous-brown, the head and entire abdomen more blackish, the legs obscure brown; head slightly wider than long, three-fourths as wide as the prothorax, parallel, the eyes rather convex, at nearly their own length from the base; antennæ dusky, gradually slightly paler basally, extending to the middle of the elytra, gradually feebly incrassate, the second joint fully as long as the first, very slightly longer than the third, fourth a little longer than wide, the outer joints fully a third wider than long, the last rather small, ovoidal, gradually pointed, shorter than the two preceding; prothorax small, subparallel, with arcuate and post-medially feebly subangulate sides and rounded base, a third wider than long, completely unimpressed; elytra well developed, subparallel, shorter than wide, a fourth wider and nearly one-half longer than the prothorax, the apical sinuses deep; abdomen not broad, distinctly narrower than the elytra, parallel, very slightly narrowing apically, the margins thin, the fifth tergite one-half longer than the fourth. Length 3.0 mm.; width 0.7 mm. Arizona (Winslow),—Wickham.

In general outline this species resembles *vancouveri* perhaps more than any other, but it is smaller, narrower and especially with more slender abdomen, has no trace of the ante-scutellar pit of that species and the antennæ are less elongate, with shorter outer joints than in that or any other species known to me. From *fusca* Fenyes, it differs in coloration and in having no trace of the "shallow rounded basal impression" of the pronotum.

Echidnoglossa Woll.

This genus, which I formerly named *Colusa* in describing some of the many Californian forms, seems to be of world-wide distribution, at least in the northern hemisphere. It has lately been identified with a Chilean genus named *Blepharhymenius* by Solier (1851), written also *Blepharhymenus* by Solier, and now changed to *Blepharrhymenus* by the compilers of the recent European catalogue.

I would prefer to use the word *Echidnoglossa* until it can be more rigidly demonstrated that our genus is absolutely the same as the Chilean, and after that it would remain to adopt a spelling conforming to the original and not emended. The genus is very abundant in species and individuals in western North America and many new ones are now added to those previously known.

Echidnoglossa æmula n. sp.—Large and rather stout, shining, dark rufous, the head, elytra and feeble posterior suffusion of the abdomen piceous-black, the legs piceous, paler distally; head of the usual form, as long as wide, the antennæ rather long, blackish, gradually paler basally, with the joints slender and much elongated, especially the first three, rather rapidly, moderately incrassate distally, the tenth joint not quite as long as wide, the last nearly as long as the two preceding; prothorax convex, slightly narrower than the head and distinctly longer than wide, parallel, the sides converging to the very narrow apex in about apical two-fifths; elytra large, not quite as long as wide, about four-fifths wider than the prothorax and a third longer, parallel, the sides much rounding inward at apex as usual, the punctures contrasting greatly with the very minute anterior sculpture, being coarse and dense; abdomen relatively narrow, swollen posteriorly, where it is but slightly narrower than the elytra, finely, sparsely punctate, coarsely and densely so in the large basal impressions of the three basal tergites. Length 3.2 mm.; width 0.73 mm. California (Lake and Sta. Cruz Cos.). Abundant.

Closely allied to *valida*, almost as large and of nearly like coloration and sculpture, except that the antennæ are not quite so long, the fine punctures of the head not uniform in density throughout as in that species but much sparser toward the middle of the front, that the prothorax is narrower, more elongate, paler in color and narrowed to apex not from about the middle but from a point distinctly in advance of the middle, and, finally, differing in its longer, coarser and notably paler pubescence. *Valida* is still represented by the unique type.

Echidnoglossa concinna n. sp.—Nearly similar to form and coloration of the body but smaller in size and with paler legs, shining, the vestiture long, coarse, pale and somewhat shaggy; head fully as long as wide, the antennæ long, slender, pale, gradually moderately incrassate and infuscate distally, the outer joints as long as wide, the last long, nearly equal to the two preceding; prothorax longer than wide, relatively small, narrower than the head, narrowed anteriorly from slightly before the middle; elytra very large, formed as in the preceding, the abdomen notably narrower, especially toward base but similarly sculptured. Length 2.85 mm.; width 0.66 mm. California (Lake Co.). Abundant.

Distinguishable from *æmula* by the stronger and still rather sparser fine punctures of the head and prothorax, but especially by the smaller, much more widely separated punctures and less rugose appearance of the elytra, by the smaller abdomen, which at base is only about half as wide as the elytra and subapically still much narrower than the latter, and by the paler legs, these being uniformly pale brownish-flavate throughout though sometimes nearly black. It is also allied to *eximia* but differs in many other ways besides the stouter form.

Echidnoglossa strangulans n. sp.—Similar to *æmula* and fully as large but rather stouter, darker, piceous-black, the prothorax scarcely at all paler, the abdomen faintly rufescent basally, the legs piceous-black, with the tarsi alone paler; pubescence shorter and more dusky; head similar, except that the posterior portion from eye to eye is not so broadly rounded, being more ogival in outline; antennæ similar, black, slightly paler basally and at apex; prothorax as wide as the head, not evidently longer than wide, parallel, narrowing anteriorly from but little before the middle; elytra very large though evidently shorter than wide, of the usual parallel form with the sides rounded externally at apex, coarsely, very densely punctate; abdomen posteriorly much narrower than the elytra, at base barely three-fifths as wide as the latter, with the usual sculpture. Length 3.33 mm.; width 0.8 mm. California (Los Angeles Co.).

Separable at once from *valida* by its darker coloration, slightly less elongate antennæ and much larger elytra, and, from *æmula*, by the larger elytra, shorter and darker prothorax and relatively less basally narrowed abdomen; it is by far the heaviest species of the genus known to me.

Echidnoglossa occidua n. sp.—Much smaller, only moderately stout, very shining, deep black almost throughout, even the prothorax and abdomen basally only very faintly rufescent, the legs piceous-black, with paler tarsi; pubescence moderately short, not dense, dusky; head almost longer than wide, ogivally rounded behind the eyes, the antennæ long, piceous-black throughout, rather slender and only moderately distally incrassate, the outer joints about as long as wide, the last not quite as long as the preceding two; punctures fine and sparser than usual; prothorax small, very noticeably narrower than the head, just visibly longer than wide, narrowed anteriorly in about apical two-fifths, the punctures fine and well separated; elytra moderately large, nearly as long as wide, parallel, of the usual form, nearly twice as wide as the prothorax and almost one-half longer, the punctures not large, scarcely at all asperate and widely separated; abdomen narrow, much narrower than the elytra even posteriorly, and, at base, scarcely three-fifths as wide as the latter. Length 2.65 mm.; width 0.55 mm. California (Pomona Mts., Los Angeles Co.),—Fall.

Easily identifiable by its black shining integuments and rather sparsely punctured elytra.

Echidnoglossa morigera n. sp.—Large and rather stout, strongly shining, deep black throughout, the first two abdominal segments scarcely visibly picescent; vestiture fine, very short, dusky-cinereous and not conspicuous; head apparently somewhat longer than wide, broadly and parabolically rounded behind the eyes, the punctures fine and well separated, almost wanting on the front, which is feebly impressed transversely between the eyes as usual; antennæ missing in the type; prothorax short, not at all longer than wide, fully as wide as the head, finely, rather loosely punctate, widest at or just behind the middle, the sides thence strongly converging and straight to the apex, feebly converging and subsinuate to the base; elytra large, but little shorter than wide, of the usual parallel form with apically rounding sides, three-fourths wider and nearly one-half longer than the prothorax, the punctures moderately large and deep, separated by slightly more than their own diameters; abdomen much dilated and as wide as the elytra posteriorly, at base three-fifths as wide as the latter, the fine punctures rather strong and numerous; legs blackish, the tarsi pale. Length 3.2 mm.; width 0.75 mm. Utah (Provo),—Wickham.

Easily known by its large size, deep black shining surface, short hexagonal prothorax, strong but separated elytral punctures and broad subapical part of the abdomen.

Echidnoglossa clavicauda n. sp.—Rather stout, shining, piceous-black, the prothorax and basal part of the abdomen barely at all paler, the femora blackish, the tibiæ piceous, the tarsi pale; pubescence rather short, not conspicuous; head as wide as long, almost semicircular behind the eyes, the antennæ very long, dark, gradually distinctly incrassate, the second joint as long as the first, slightly longer and thicker than the third, the fourth still slightly shorter, outer joints almost longer than wide, the last rather longer than the two preceding; prothorax well developed, about as wide as the head, not longer than wide, strongly narrowed anteriorly from about the middle, finely but strongly, rather closely and evenly punctate throughout; elytra subquadrate, coarsely, closely punctate, three-fourths wider and two-fifths longer than the prothorax, much impressed behind the scutellum as usual; abdomen relatively very much dilated but not as wide as the elytra posteriorly, at base but little more than half as wide as the elytra. Length 3.1 mm.; width 0.7 mm. California (Soda Springs, Anderson Valley, Mendocino Co.).

Allied somewhat closely to *valida* but not so large, with rather less incrassate antennæ, more strongly narrowed basal part of the abdomen and more slender legs; as usual throughout, the elytral punctures become much smaller and sparser posteriorly.

Echidnoglossa ludibunda n. sp.—Slender, with large elytra; color dark red-brown, with a feeble piceous lustre, the first two abdominal segments rufous, the next three deep black, the legs dark, the tarsi pale; pubescence rather coarse and pale, distinct; head well developed, a little narrower than semicircular behind the eyes, fully as long as wide, minutely, not densely punctate; antennæ infuscate, but slightly paler basally, long, gradually distinctly incrassate and rather thick distally, the second joint barely perceptibly longer or thicker than the third, three to five evenly and moderately decreasing in length, the outer joints nearly as long as wide, the last as long as the two preceding, gradually pointed; prothorax small, much narrower than the head, slightly longer than wide, strongly narrowed anteriorly from a little before the middle, finely but rather strongly, subevenly and not closely punctate; elytra relatively unusually large, quadrate, twice as wide as the prothorax and one-half longer, not coarsely and somewhat sparsely punctate, except near the base where the punctures become coarse and dense, the scutellar impression strong, subquadrate; abdomen narrow, moderately claviform, much narrower than the elytra, polished, only very minutely, sparsely and almost imperceptibly punctate, except in the impressions. Length 3.0 mm.; width 0.68 mm. California (Gilroy Hot Springs, Sta. Clara Co.).

This distinct species may be distinguished from *eximia*, to which it is more especially related, in its much less black color and feeble piceo-æneous lustre, relatively much larger elytra, narrower abdomen and very much narrower prothorax.

Echidnoglossa defecta n. sp.—Deep black almost throughout, the legs dark brownish-piceous; surface very lustrous, the punctures of the head, pronotum and convex parts of the abdomen very fine and notably sparse, of the elytra stronger but not coarse and well separated throughout; pubescence not dense, dusky-cinereous; head nearly as long as wide, semicircular behind the eyes; antennæ long, piceous-brown, slender, only very moderately incrassate distally, the second and third joints very long, equal, the fourth much shorter, outer joints as long as wide, the last gradually pointed, longer than the preceding two; prothorax relatively small, shorter and much narrower than the head, not longer than wide, narrowed anteriorly from before the middle; elytra large, nearly as long as wide, parallel, almost twice as wide as the prothorax and fully one-half longer; abdomen relatively slender and only slightly inflated posteriorly, very much narrower than the elytra, scarcely at all paler basally. Length 2.85–3.2 mm.; width 0.56–0.62 mm. California (Gilroy Hot Springs).

Differs from the preceding in its blacker coloration, more shining lustre and finer and sparser punctures, much less claviform abdomen and slightly shorter, notably more slender and less distally incrassate antennæ, and, from *eximia*, it differs in its relatively much nar-

rower as well as less claviform abdomen, shorter and very much less distally thickened antennæ, sparser sculpture, darker color and other features; in *eximia*, from Humboldt Co., the long antennæ are much heavier and thicker distally than in any of the allied species, and the prothorax is larger than in either *ludibunda* or *defecta*.

Echidnoglossa illecta n. sp.—Moderately stout and shining, uniform piceous-black, the abdomen behind the second tergite more intense black, the legs dark piceous, the punctures small, rather well separated though less so than in the preceding and not so fine, strong and moderately close on the elytra, stronger but not dense basally, fine and rather numerous on the convex part of the abdomen, the vestiture notably palish, long and coarse, distinct; head as long as wide, circularly rounded behind the eyes, the antennæ only moderately long, rather slender and only very moderately incrassate distally, black throughout, the outer joints fully as long as wide, the last rather longer than the two preceding; prothorax relatively small, barely somewhat longer than wide, narrower than the head, narrowed anteriorly from a little before the middle; elytra large, quadrate, almost twice as wide as the prothorax and fully one-half longer; abdomen everywhere much narrower than the elytra and only very feebly subdilated posteriorly, at base scarcely three-fifths as wide as the elytra. Length 3.0 mm.; width 0.63 mm. Oregon (Portland),—Wickham.

This species is also allied to *eximia* but differs in the shorter, thinner and much less incrassate antennæ, relatively smaller prothorax and larger elytra and far less dilated abdomen posteriorly, the latter being also more punctate and pubescent and with the tergites less convex. Another example, from the vicinity of Portland, now before me, has the antennæ longer and more incrassate distally, but the abdomen is narrow and the differences may be in great part sexual.

Echidnoglossa quadripennis n. sp.—Moderately stout, dark rufopiceous, the head and posterior part of the abdomen deeper in color, black, the legs dark piceous; sculpture nearly as in the preceding, the pubescence not so long but rather coarse, palish and distinct; head rather large, not as long as wide, semicircular behind the unusually small eyes; antennæ blackish, rather stout but only feebly incrassate, unusually short and but little longer than the head and prothorax, the outer joints distinctly wider than long, the last rather longer than the two preceding, the second distinctly longer than the third; prothorax relatively small, only very slightly narrower than the head and nearly as wide as long, narrowed anteriorly from barely before the middle; elytra large, quadrate, twice as wide as the prothorax and more than one-half longer, the punctures not very coarse and slightly separated throughout; abdomen everywhere much narrower than the elytra, only moderately

and not at all conspicuously dilated posteriorly. Length 3.2 mm.; width 0.66 mm. California (Redwood Creek, Marin Co.).

Very distinct in its unusually short antennæ, with the penultimate joints distinctly shorter than wide and in its comparatively large size, rather narrow abdomen and other characters.

Echidnoglossa leviventris n. sp.—Black, highly shining, the legs blackish-piceous, the vestiture rather long and coarse but not dense or notably pale; punctures fine, well separated, larger and stronger but not dense or coarse on the elytra, sparse but evident on the convex parts of the abdomen; head rather small, as long as wide, a little narrower than semicircular behind the somewhat well developed and moderately convex eyes; antennæ blackish, piceous basally, long, very slender, only very slightly incrassate distally, the penultimate joints fully as long as wide, the last as long as the two preceding; prothorax small, narrow, distinctly elongate, much narrower than the head, narrowed anteriorly from about the middle; elytra large, quadrate, more than twice as wide as the prothorax and fully one-half longer; abdomen slender, very feebly and gradually dilated posteriorly, at the widest part only about three-fourths as wide as the elytra. Length 3.1 mm.; width 0.63 mm. California (Lake Co.).

Distinguishable by the small narrow prothorax and the unusually narrow and feebly posteriorly enlarged abdomen, shining black integuments and slender antennæ.

Echidnoglossa tenuicornis n. sp.—Moderately slender, deep shining black, the abdomen feebly rufescent except posteriorly, the legs blackish-piceous, with paler tarsi; punctures fine, nowhere very close, strong and moderately coarse but evidently separated on the elytra; pubescence short, close and only slightly pale; head nearly as long as wide, a little narrower than semicircular behind the moderate eyes; antennæ piceo-rufous, slightly paler apically and basally, long and very slender, very feebly incrassate distally, the eighth and ninth joints longer, the tenth a little shorter, than wide, the last gradually pointed and as long as the two preceding; prothorax well developed, distinctly elongate, barely at all narrower than the head, narrowed anteriorly in but little more than apical third, with the converging sides rounded and the side angles unusually broadly rounded and indistinct; elytra only moderately large, quadrate, three-fourths wider and a third longer than the prothorax; abdomen much dilated posteriorly, where it is rather wider than the elytra, slender at base. Length 2.8 mm.; width 0.6 mm. California (Sonoma Co.).

To be identified very readily by the slender antennæ, long and more anteriorly narrowed prothorax, moderate elytra and strongly claviform abdomen.

Echidnoglossa ventralis n. sp.—Smaller, more convex, paler in color, dark red-brown, the head and fourth and fifth tergites black, the legs dark piceous-brown; surface shining, the head very finely, the pronotum less finely but loosely, the elytra very coarsely and rather closely, the abdomen finely but obviously punctate, the pubescence fine, very short, not markedly pale and not dense; head as long as wide, semicircular behind the eyes; antennæ long, piceous, a little paler at apex and basally, joints two to four decreasing uniformly and rather rapidly, the outer joints as long as wide, the last fusiform, as long as the two preceding; prothorax large, convex, slightly longer than wide, fully as wide as the head, anteriorly narrowed very strongly from very near the middle; elytra smaller than in any other known species, parallel, the sides gradually rounding inward posteriorly, nearly as long as wide, barely one-half wider and a fifth longer than the prothorax, rather convex; abdomen very rapidly and strongly dilated posteriorly, where it is evidently wider than the elytra. Length 2.68 mm.; width 0.6 mm. California (Siskiyou Co.).

Allied only to *gracilis* and the following, differing from *gracilis* in the stouter, much more posteriorly inflated abdomen, relatively larger prothorax and still coarser and more cribrate elytral punctures, which are relatively coarser than in any other species that I have seen.

Echidnoglossa gaudens n. sp.—Stouter than the preceding, strongly shining, pale testaceous, the elytra a little darker, the abdomen blackish near the apex; punctures of the head minute, not dense, of the pronotum relatively coarser, closer and more uniform than usual, of the elytra moderately coarse, well separated and nearly uniform, scarcely coarser basally and becoming fine only near the apex, of the abdomen fine and sparse; vestiture palish but very short, inconspicuous; head and antennæ nearly as in the preceding, the former a little broader and the latter somewhat longer but not quite so strongly or rapidly incrassate distally; prothorax moderately large, not quite as wide as the head and only just visibly longer than wide, narrowing apically from a point more anterior and with the lateral angles more rounded; elytra relatively larger, more transverse and distinctly shorter than wide, parallel, the sides rounding more abruptly and through a shorter distance apically, two-thirds wider and one-third longer than the prothorax; abdomen claviform, strongly dilated posteriorly, where it is fully as wide as the elytra. Length 2.72 mm.; width 0.68 mm. California (Humboldt and Sonoma Cos.).

Differs from *gracilis* in its stouter form, much larger elytra, rounding externally and narrowing from a point much more posterior and in its strongly inflated abdomen posteriorly, this in *gracilis* being notably narrow, only feebly inflated behind and there distinctly narrower even than the unusually small elytra of that species; the specimen from Sonoma is darker in coloration than the type and is not quite so stout; it may represent a subspecific form.

Echidnoglossa eminens n. sp.—Stout, black or slightly picescent throughout, the legs blackish, the tibiæ slightly, the tarsi distinctly, paler; integuments rather shining, the punctures of the head and pronotum very minute and comparatively sparse, of the elytra fine and closer but well separated, of the abdomen distinct but not coarse and well separated in the impressions, minute and close elsewhere, the pubescence rather long and coarse, palish and distinct; head small, as long as wide, evenly semicircularly rounded behind the eyes, the antennæ notably long, gradually very distinctly incrassate and thick distally, blackish, but little paler basally, of the usual structure, the outer joints as long as wide, the last unusually long, longer than the two preceding, with a moderate medial constriction; prothorax large, convex, longer than wide, much wider than the head, nearly parallel, narrowing in about anterior two-fifths; elytra large, parallel, slightly shorter than wide, of the usual form, three-fourths wider and a third longer than the prothorax, impressed behind the scutellum; abdomen distinctly narrower than the elytra, parallel, with evidently and evenly arcuate sides, widest at the middle, the first five tergites equal in length, strongly transverse, less convex than in the typical forms. Length 3.3 mm.; width 0.75 mm. California (Siskiyou Co.).

Belongs near *grandicollis* and with the same general form and peculiar minute punctures even on the elytra, but differing in the much longer, heavier and more incrassate antennæ, relatively narrower, more elongate and more anteriorly narrowed prothorax, more rounded and less truncate base of the head and sparser punctulation of both these somites; the pubescence, also, is longer, coarser, paler and much more conspicuous. These two species constitute a group, at least of subgeneric weight in having the abdomen parallel, with the three basal impressions not coarsely and densely punctate, in the smaller head and more developed prothorax and in the very minute dense punctures of the integuments throughout.

In my last revision of this genus (Ann. N. Y. Acad. Sci., VII, p. 312), I made some statements which were due to too hasty observation and which it will be necessary to withdraw. *Exilis* is by no means a synonym of *eximia*, for example, the size being much smaller and the form more slender, but especially because the antennæ are much smaller, less incrassate and with the outer joints very evidently shorter than wide. Furthermore, though there are some sexual differences in the size of the antennæ and prothorax, these discordances are very slight and there are no apparent sexual peculiarities of color or sculpture. The errors were caused by confounding several distinct species.

Tribe MYRMEDONIINI.

Tinotus Sharp.

This is a moderately large genus, characteristically American, and distributed throughout the temperate parts of the North American continent, excepting apparently the true Pacific coast fauna, from which region I have as yet seen no representative. There are two groups of species, represented by *caviceps* and *imbricatus*.

Group I—Type *caviceps* Csy.

In this group the abdomen has no ground sculpture, and each puncture has two strong and subparallel conspicuous and approximate lines of considerable length, extending posteriorly therefrom; in *caviceps* and *paratus* the size is larger than usual and the head of the male is deeply concave nearly throughout the extent of its upper surface. The following is allied to *caviceps:*

Tinotus paratus n. sp.—Stout, subparallel, rather convex, feebly shining and very finely but strongly micro-reticulate, the abdomen strongly shining and without sculpture, excepting the long bilineiform punctures; pubescence short, not dense, very coarse, palish, longer and bristling along the segmental apices of the abdomen; color piceous-black, the elytra faintly rufescent, the legs dark, paler distally; head three-fifths as wide as the prothorax, parallel, wider than long, the eyes rather small, feebly convex and very finely faceted; antennæ rather short, stout, gradually strongly incrassate, compact and thick distally, black, paler basally, the third joint as long as the first but a little thinner and obconic, much longer than the second, fourth quadrate, the outer joints nearly twice as wide as long, the last ovoidal, obtuse, as long as the two preceding; prothorax nearly twice as wide as long, strongly rounded at the sides and widest rather before the middle (♂), or at the middle (♀), the sides straighter basally (♂) but evenly rounded (♀); apex but little narrower than the base, which is rounded and with obtuse but distinct angles, the punctures strong and somewhat rough though not dense, the surface very convex, with a large median depression from apex to near the base (♂), or evenly convex and with a fine, faintly impressed median line vanishing basally (♀); elytra transverse, parallel, rather convex, strongly and roughly punctate, the suture fully as long as the prothorax (♂), or a little shorter (♀), the apices broadly sinuate externally, the flanks not projecting posteriorly so far as the inner parts of the apex; abdomen almost as wide as the elytra, parallel, narrowing slightly posteriorly, the margins notably thick; hind tarsi long, the basal joint equal to the next two. Length 2.4–3.0 mm.; width 0.8–0.95 mm. Montana (Kalispell),—Wickham.

Resembles *caviceps* very much in color, sculpture and general facies, but in that species the third antennal joint is shorter than the second and very much shorter than the first, the eleventh much longer than the two preceding and the elytra are relatively slightly longer, with the external sinuses at apex obsolete and forming oblique straight edges. There are also a few other distinctive features, such as the evidently still larger average size of *paratus*.

The following three species are much smaller than either *caviceps* or *paratus* and have a rather different habitus, because of their pale coloration; in no one of the examples at present before me can any indication of male characters be detected on the upper surface of the body. *Trisectus* is more slender in form and is dark in color, the two oblique basal impressions of the prothorax possibly betokening the male, but rather more probably not; it hardly seems that they can be spurious or individual, however, as they are deep and perfectly symmetric bilaterally:

Tinotus pallidus n. sp.—Stout, fusoid, moderately convex and rather shining, pale and uniform brownish-testaceous throughout the body and legs, the head blackish-piceous; punctures small, well separated, strongly asperate, the bilinear punctures of the abdomen numerous; vestiture pale, consisting of very thick, short and separated hairs, longer on the abdomen, where they bristle from the segmental apices; head orbicular, a little wider than long, the eyes large, at less than their own length from the base; antennæ rather short, incrassate distally, blackish, paler basally, the third joint as long as the second but more slender, fourth a little longer, the fifth somewhat shorter, than wide, the outer joints two-thirds wider than long, the last as long as the two preceding; prothorax nearly four-fifths wider than the head, not quite twice as wide as long, the sides strongly rounded, strongly converging before the middle, the apex much narrower than the rounded base, the surface strongly convex and even; elytra rather large, fully as wide as the prothorax and very distinctly longer, the oblique sides of the apex nearly straight; abdomen not quite as wide as the elytra, parallel basally, gradually strongly and arcuately narrowing apically, the apex about three-fifths as wide as the base; margins thick. Length 2.0–2.3 mm.; width 0.63–0.68 mm. Iowa (Cedar Rapids).

Distinguishable by its stout fusiform outline and pale coloration, also, in common with many other species, by its short pale and very coarse vestiture.

Tinotus brunneus n. sp.—Narrower, less fusiform and more convex, slightly shining, pale red-brown in color, the head and a feeble abdominal cloud, involving the fourth and fifth tergites, blackish; sculpture and

vestiture as in the preceding though both are finer on the head and pronotum; head a little larger, more parallel and less rounded at the sides, wider than long, the large eyes rather convex, at distinctly less than their own length from the base; antennæ relatively less short, slender, pale basally, gradually very moderately incrassate, compact and infuscate distally, the second and third joints elongate, equal, fourth slightly, the fifth distinctly, shorter than wide, the outer joints scarcely one-half wider than long, the last somewhat longer than the two preceding; prothorax very convex, similar in form to the preceding; elytra also well developed and similarly fully as wide as the prothorax or somewhat wider, with the parallel sides slightly arcuate, much longer than the prothorax, the oblique external part of the apices straight; abdomen about as wide as the elytra, parallel, arcuately and moderately narrowing apically, the fifth tergite three-fourths as wide as the base, subequal in length to the fourth; margins not quite so thick as in *pallidus*. Length 1.65 mm.; width 0.55 mm. Pennsylvania (near Philadelphia).

Allied to the preceding but somewhat smaller, distinctly narrower, the abdomen differently colored, the punctures and hairs of the head and pronotum finer, the antennæ of different structure, the head larger and more parallel and the abdomen less narrowed at apex.

Tinotus binarius n. sp.—Minute and still more slender, not quite so convex and subparallel, somewhat shining, pale red-brown in color, the head darker and the legs paler, the fourth tergite with a small and very faint median cloud; sculpture and vestiture nearly as in *pallidus;* head slightly wider than long, subparallel, the eyes large and rather convex, at less than their own length from the base; antennæ short, gradually strongly incrassate, compact and blackish distally, slender and pale basally, the third joint a little shorter and more slender than the second, the fourth not quite as long as wide, the outer joints not quite twice as wide as long, the last ovoidal, obtuse, longer than the two preceding; prothorax three-fourths wider than long, subparallel, the sides strongly arcuate, more converging apically, the base strongly rounded, the surface evenly convex; elytra short and, as usual in this group, somewhat wider than the prothorax, the suture not quite so long as the latter and much shorter than the elytral flanks; abdomen almost as wide as the elytra, subparallel basally, narrowing apically, the side margins unusually thin. Length 1.2 mm.; width 0.38 mm. Arizona (Tucson).

This species can be known readily from either of the preceding by its much smaller size and narrower, more parallel form, also by numerous details of structure, such as the less transverse prothorax with more rounded base, the much shorter elytra and the finer abdominal margins. I could find only one example.

Group II—Type *imbricatus* Csy.

The species of this group differ greatly from those of Group I in the sculpture of the abdomen, there being a distinct and irregular coarse micro-reticulation and, besides this, two straight, anteriorly and posteriorly widely flaring lines from each puncture, each line uniting with the anterior or posterior lateral puncture in quincunx order, thus producing an imbricate appearance. The male has the very convex pronotum impressed nearly as in *caviceps* and *paratus*, of the preceding group, but the head seems to be unmodified in that sex.

The following four species are allied more or less evidently to *imbricatus:*

Tinotus texanus n. sp.—Stout, moderately convex, rather dull, the abdomen less so; color piceous-black, the elytra distinctly, the abdominal apex faintly, paler, the legs pale brownish-flavate; integuments very finely but strongly micro-reticulate, the abdomen with coarse faint reticulation; punctures fine and rather close-set throughout, the pubescence short, rather close, fine, dusky and indistinct anteriorly, coarser, paler and more visible on the elytra, longer, finer, sparser and not at all conspicuous on the abdomen; head three-fifths as wide as the prothorax, wider than long, subparallel, the sides feebly arcuate, the eyes not at all prominent, at nearly their own length from the base; antennæ blackish, paler basally, moderately short, rather slender, only moderately incrassate distally, the second and third joints much elongated and subequal (♀), the third almost imperceptibly the longer, fourth nearly as long as wide, the outer joints short, compact, not quite twice as wide as long, the last fully as long as the two preceding, obtusely pointed; prothorax four-fifths wider than long, the sides moderately rounded, subparallel basally, converging anteriorly from about the middle, the base rounded; elytra fully as wide as the prothorax, the suture not quite so long as the latter, the oblique sides of the apex distinctly sinuate; abdomen nearly as wide as the elytra, subparallel and with moderate margins basally, only very slightly narrowing apically, the fifth tergite four-fifths as wide as the base, nearly one-half longer than the fourth, the fifth (♀) truncate, the truncature with extremely minute close acute crenulation. Length 1.75 mm.; width 0.6 mm. Texas (Galveston).

Allied rather closely to *imbricatus*, the type differing from the female of that species in the less transverse prothorax and elytra and in the far less unequal second and third antennal joints, the third in *imbricatus* being notably longer than the second.

The females in most of the species of this group have at the base of the pronotum two small and feeble impressions, separated by a little more than the width of the scutellum.

Tinotus cœlebs n. sp.—Stout, feebly, the abdomen more evidently, shining, black, the elytra faintly rufescent, the legs pale; sculpture and vestiture nearly as in *imbricatus*, except that the coarse asperate punctures of the elytra become notably finer and closer toward the suture than elsewhere; head nearly similar though somewhat larger, the antennæ also nearly similar but with the third joint much more evidently longer than the second, the fourth as long as wide, subparallel, the outer joints three-fourths wider than long; prothorax three-fourths wider than long, the sides strongly rounded, more converging anteriorly, the base rounded, the surface (♂) with a large and broadly oval impression extending from base to near the apex, the bottom of which is more finely chagrined; elytra moderately short, the suture fully as long as the prothorax, the oblique sides of the apex broadly sinuate, the flanks, as usual, much longer than the suture; abdomen broad, with thick margins, about as wide as the elytra, gradually and very feebly narrowed and with nearly straight sides to the fifth tergite, which is four-fifths as wide as the base and a third longer than the fourth, the sixth ventral plate arcuato-truncate, the truncature having a dense porrect fringe of coarse pale semi-membranous hairs. Length 2.4 mm.; width 0.78 mm. Texas (Austin).

Differs from the two preceding in its much stouter form, rather larger size and in having the elytral punctures more evidently smaller and closer toward the suture. The male type differs from that sex of *imbricatus*, also, in having a relatively more elongate third antennal joint and in the larger and less transverse prothorax.

Tinotus fusinus n. sp.—Rather fusiform, somewhat shining, the abdomen strongly so, deep black in color, the elytra not evidently at all paler, the legs dark brown; sculpture nearly as in the preceding species but rather finer, the punctures of the abdomen sparser, with the imbricating lines much feebler; head, eyes and antennæ nearly as in *imbricatus;* prothorax a little less transverse, evidently less than twice as wide as long, the sides strongly rounded and more converging anteriorly, becoming parallel basally; elytra short, apparently somewhat wider than the prothorax except at base, the sides slightly arcuate basally, the suture barely as long as the pronotum; abdomen broad, at base subequal in width to the elytra, thence evenly but feebly tapering, with nearly straight sides and somewhat thin margins, to the fifth tergite, which is rather more than three-fourths as wide as the base, the portions behind this tergite broadly subtubulate (♂), as in the other species. Length 1.6 mm.; width 0.56 mm. Tennessee (Nashville).

This species, as represented by the single male before me, is allied rather closely to *imbricatus*, differing apparently in its less transverse and more parallel prothorax, the large oval depression of the male having its pubescence very much coarser and less sericeous, though similarly denser, paler and more conspicuous than that of the

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remainder of the pronotum; it also differs in its darker coloration, shorter elytra, sparser abdominal punctures and much more feeble radiating lines extending from the latter.

Tinotus pectinellus n. sp.—Almost parallel, rather slender and convex, dull, the abdomen somewhat strongly shining; color dark piceous-brown throughout, the legs pale, brownish-flavate; head large, convex, wider than long, two-thirds as wide as the prothorax, the eyes moderate; antennæ (♀) pale piceous, still paler basally, short, rapidly incrassate distally, the third joint barely at all longer than the second, fourth much shorter than wide, the outer joints short, fully twice as wide as long, the tenth asymmetric, shorter on its inner side, the last moderate, conoidal; prothorax of the usual form, three-fourths wider than long, with rounded sides which are more converging anteriorly, the base rounded; elytra equal in width to the prothorax, parallel, the suture evidently shorter than the pronotum but not so greatly shorter than the flanks as it is in most of the species; abdomen very nearly as wide as the elytra, perfectly parallel throughout to the tip of the fifth tergite, where the thick margins become fine, giving an impression of slight apical narrowing; sixth tergite (♀) with the feebly sinuato-truncate apex minutely, closely and subacutely pectinulate. Length 1.6 mm.; width 0.43 mm. Arizona (Tucson),—Wickham.

Distinct in its narrower, nearly parallel form and parallel abdomen; the two feeble basal impressions of the female pronotum, visible in the other species of this group, are wholly obsolete here.

A female specimen from Gallup, New Mexico, collected by Wickham, resembles so closely the female of *imbricatus* from New York, that it may possibly be identical; the differences, at any rate, seem rather insignificant in the only two exponents at hand; it is very slightly less stout and with somewhat denser sculpture.

In the two following species the abdominal sculpture is much denser than in any of the preceding, though in *parvicornis* it is of the same character, at least toward base:

Tinotus parvicornis n. sp.—Rather slender and convex, subparallel, alutaceous, dark piceous-brown, the head and the abdomen, except the fine apical margins of the segments, blackish, the elytra but faintly paler, the legs pale; punctures anteriorly very fine, those of the anterior parts very minute, not asperate and each at the centre of a minute ring, those of the elytra coarse and strongly asperate, of the abdomen rather close-set and asperate throughout, the first two tergites with regular imbrication as in the preceding species, the others with the lines from the punctures less diverging, coming inside of their more lateral neighbors and at the same time more asperate than in the preceding species; vestiture inconspicuous; head fully three-fifths as wide as the prothorax,

but little wider than long, subinflated basally, the eyes moderate, convex; antennæ blackish, paler basally, unusually short, gradually strongly incrassate distally, the third joint but little longer than the second, fourth much shorter than wide, the compact outer joints very short, more than twice as wide as long, the last almost globular, but little longer than wide; prothorax three-fourths wider than long, the sides feebly converging and broadly arcuate nearly from the rounded base to the apex; surface (♀) not at all impressed at base; elytra as wide and long as the prothorax; abdomen with thick margins, at base as wide as the elytra, thence evenly though only just perceptibly narrowing, with straight sides, to the fifth tergite. Length 1.45 mm.; width 0.35 mm. Texas (Austin).

Very evidently distinct in its slender form, unusually short and rather strongly incrassate antennæ, sculpture, as detailed above, and other features.

Tinotus densiventris n. sp.—Slender, moderately convex, subparallel, not shining, the abdomen moderately so, dark red-brown in color, the head and abdomen, except the segmental apices, blackish, the legs pale brown; sculpture anteriorly somewhat as in *parvicornis*, on the abdomen still denser, asperate, subimbricate only at base; head nearly as in the preceding but with more developed eyes, the antennæ longer, blackish, paler basally, the fourth joint nearly as long as wide, tenth barely twice as wide as long, the last distinctly elongate; prothorax well developed, convex, more transverse than in the preceding, the sides rounded, more converging anteriorly, the surface unimpressed at base; elytra as wide and as long as the prothorax; abdomen in form and proportion nearly as in *parvicornis* but much more densely punctate. Length 1.5 mm.; width 0.38 mm. Texas (Waco).

Distinguishable from the preceding, which it much resembles in outline, by its longer antennæ and very much denser and strongly asperate abdominal sculpture. The female type is very well matched by another female example, taken by Prof. Wickham at Riverside, Arizona, except that in the latter the prothorax seems to be a trifle shorter and more transverse, the coloration darker and the tarsi relatively longer.

The last antennal joint in several species of this genus exhibits distinct traces of a submedian constriction, analogous to that alluded to under the genus *Thiasophila*, and it may be a more general character than I formerly thought; it is distinctly observable in almost all the species of *Oxypoda*.

Xenodusa Wassm.

The American species hitherto referred to *Lomechusa* and *Atemeles* have been separated by Dr. Wassmann under the above name;

they differ from both of these genera, not only in the disposition of the pubescent tufts at the sides of the abdomen, but in their slender antennæ. The species are closely allied among themselves, adhering, as in *Atemeles*, very closely to the type generic structure throughout, but the following seem to be a few forms worthy of separation from *cava* and *montana:*

Xenodusa lobata n. sp.—Stout, parallel, pale red-brown in color and alutaceous, the abdomen polished; head comparatively small, nearly as long as wide, but little over two-fifths as wide as the prothorax, the eyes unusually large, convex, at only very little more than their own length from the base, the sides behind them straight and distinctly converging to the base; frontal impression and the antennæ nearly as in *cava*, the latter slightly longer and more slender; prothorax as in *cava*, except that the sides before the middle are more rounded and less angulate and thence to the base not sinuate, as in that species, but subarcuate, the basal lobe strongly rounded, separated from each basal angle by a deep and pronounced sinus; elytra and abdomen nearly as in *cava*, except that the two basal tergites are not so evidently punctulate. Length 5.7 mm.; width 2.0 mm. Iowa.

Differs from *cava* Lec., in its larger size, paler coloration, smaller head, with much larger and proportionally less prominent eyes and in the form of the sides of the prothorax. In *cava* the color is dark red-brown as a rule, the eyes from above smaller, very prominent and at fully three-fourths more than their own length from the base, the sides behind them nearly straight and strongly converging; my two examples of *cava* are from Michigan.

Rey makes barely any allusion to sexual differences in the closely allied genus *Atemeles* and they appear to be very slight here; at any rate, one of my two examples of *cava* has the sixth ventral broadly, and the other more narrowly and parabolically, rounded, and they may therefore represent the male and female, but there are no other striking differences to be observed.

Xenodusa probata n. sp.—Large, stout and nearly similar to the preceding in general form, sculpture and coloration, though not so pale and more nearly like *cava* in that respect; head larger, distinctly wider than long, more than two-fifths as wide as the prothorax, the eyes rather larger but less prominent than in *cava* and smaller, though otherwise similar, than those of *lobata*, at one-half more than their own length from the base, the sides behind them nearly straight but only just visibly converging, the frontal impression and antennæ nearly as in the preceding; prothorax as in *lobata* in general form but rather less transverse and with the sides before the middle more prominently rounded, though

less prominent than in *cava*, and thence to the base about straight from a dorsal viewpoint, the basal lobe broader and more indefinite, not separated from the angles by deep and symmetrical sinuses, as it is in that form, the indistinct punctulation and the pubescence both closer and more evident than usual; elytra and abdomen nearly as in *lobata*. Length 5.3 mm.; width 2.25 mm. Pennsylvania (Westmoreland Co.),—Schmitt.

Evidently different from either *cava* or *lobata* by reason of the subparallel head and the broader and less abruptly formed basal lobe of the prothorax, but whether these forms are species, or have less value, can only be determined by more ample material and more detailed study of the genus than is possible at present.

Montana Csy., differs from specimens before me of both sexes from Manitoba, identified as *hirsuta* Wassm., in the decidedly less slender antennæ, with a shorter and stouter basal joint and in the larger eyes, which are somewhat less than their own length from the base. Two examples from Colorado, male and female, are closely allied to the Manitoba species, but differ in having the antennal joints more strongly narrowed basally, or more abruptly inflated apically, and in the somewhat less strongly reflexed sides of the pronotum basally; the prothorax in this Colorado form is much wider in the male than in the female.

Xenodusa caseyi Wassm., from Colorado, and *angusta* Fall (*Lomechusa*), from southern California, differ from any of those mentioned above in their much narrower form of body, and the former, at least, by having a relatively much longer and more slender basal antennal joint and anteriorly uninflated prothorax, similar in fact to that of the European *Atemeles emarginatus*.

Myrmedonia Erichs.

In this and allied genera the new world is more deficient than the old, not only in number but in the size of the species, some of the Hindustan species being very large, equaling in this respect our *Maseochara*, of the preceding tribe. The following species is allied to *loricata* Csy.:

Myrmedonia carolinæ n. sp.—Rather stout, not parallel, convex, shining, dark piceo-testaceous, the elytra somewhat blackish externally, the abdomen black, the first two segments paler, especially at their apices; pubescence short, rather sparse and inconspicuous; head nearly as long as wide, fully four-fifths as wide as the prothorax, the eyes moderate,

at their own length from the base, the sides behind them parallel and straight, then rounding to the base, the punctures rather large though feeble, parted by a narrow impunctate line; antennæ nearly half as long as the body, slender and pale basally, rapidly very strongly incrassate and infuscate distally, the third joint only a little longer than the second, fourth slightly longer than wide, tenth scarcely one-half wider than long, the last ogival, the basal joint not stout; prothorax relatively small, less than one-half wider than long, widest and with the sides subprominently rounded before the middle, thence subsinuately narrowing to the distinct basal angles, the base rounded; surface finely, sparsely punctate, with a distinct subtransverse ante-scutellar impression; elytra large, transverse, parallel, with rather arcuate sides, nearly one-half wider and a third longer than the prothorax, finely but strongly, not densely punctate, more strongly and closely on the basal slope, the apices scarcely at all sinuate externally; abdomen parallel, with evenly and moderately arcuate sides, at the middle about as wide as the elytra, the surface smooth, minutely, remotely punctulate, with thin side margins, the fourth and fifth tergites equal, strongly transverse; sterna nearly as in *loricata* but not quite so broad between the coxæ. Length 3.0 mm.; width 0.8 mm. North Carolina (Tryon).

Differs from *loricata* in its much smaller eyes, with the sides of the head behind them less converging, and in its relatively shorter third antennal joint, which, in that species, is very much longer than the second; also in its smaller and shorter prothorax, more angulate at the sides, more sparsely punctate elytra and many other structural characters.

Myrmedonia criddlei n. sp.—Moderately stout and convex, blackish-brown, the prothorax slightly paler externally, the elytra feebly darker externally and toward the scutellum; abdomen black, the first two segments paler, the legs dark reddish-brown; pubescence short and inconspicuous; head and pronotum finely and very densely chagrined and dull, the elytra more coarsely, very strongly micro-reticulate and more shining, with fine subasperate close-set punctures; abdomen shining, minutely, remotely punctulate; head three-fourths as wide as the prothorax, as long as wide, the eyes rather large, prominent, the sides behind them a little shorter and rapidly convergent and broadly arcuate to the base; antennæ extending to the elytral apex, very stout, gradually incrassate, testaceous in color throughout, the outer joints nearly one-half wider than long, second much shorter than the third, which is strongly obconic, somewhat compressed, the first five or six joints (♂) bristling within with long pale hairs; prothorax two-fifths wider than long, nearly as in the preceding, the sides not quite so prominently rounded before the middle, the median line finely impressed throughout, without basal impression; elytra transverse, truncate, a fourth or fifth wider than the prothorax and of equal length; abdomen fully as wide as the elytra, parallel, with the sides only very slightly arcuate; sterna nearly as in

loricata, the coxæ not quite so widely separated; hind tarsi long and rather stout, the basal joint almost as long as the next three. Length 3.2 mm.; width 1.0 mm. Manitoba (Aweme),—Norman Criddle.

This distinct species is not allied closely to any other now known; it is represented in my cabinet by a single male example, having the sixth tergite broad and feebly sinuate at apex, the edge finely serrulate.

Myrmedonia recisa n. sp.—Stout, subparallel, convex, strongly shining throughout, pale piceo-testaceous, the prothorax paler and brighter, the abdomen blackish, the segmental apices and the first two tergites paler; pubescence pale but sparse and inconspicuous, the punctures minute and very remote, closer though scarcely larger on the elytra, the abdomen impunctate except irregularly along the segmental apices; head large, transverse, the eyes prominent, at less than their own length from the base, the sides behind them parallel for a short distance, then broadly rounding to the base; antennæ pale flavo-testaceous throughout, slender, only slightly and gradually incrassate distally, the basal joint longest, moderately thick, third slightly though evidently longer than the second, fourth, fifth and sixth longer than wide, tenth nearly as long as wide, the last as long as the two preceding, slender, gradually pointed; prothorax two-fifths wider than long, widest near the apex, the sides feebly converging and broadly arcuate to the rather blunt basal angles, the base rounded, the surface convex and perfectly even; elytra transverse, parallel, about a third wider and but little longer than the prothorax; abdomen as wide as the elytra, narrowed very slightly apically. Length 2.5 mm.; width 0.83 mm. Pennsylvania.

This species was erroneously included among my examples of *fauveli* Shp., the latter species being confined in this country, to the regions between Louisiana and southern California. The present species is very much stouter than *fauveli* and with relatively larger head and prothorax, though resembling that species very much otherwise, except in certain details of structure.

Microdonia Csy.

The following species has hitherto been placed with the unique type of *occipitalis* in my collection, but recent more careful examination shows that it is different:

Microdonia retrusa n. sp.—Rather slender, depressed, dull in lustre, the abdomen more shining though rather strongly and roughly, moderately closely punctate; punctures anteriorly small and close, the pubescence throughout very short; coloration as in *occipitalis*, except that the antennæ are blackish and not dark red-brown; head evidently narrower

than the prothorax, wider than long, not much swollen and with rounded sides basally, the eyes prominent, at a little more than their own length from the base and slightly less prominent than the sides behind them; antennæ as in *occipitalis* but not quite so stout, the outer joints less transverse, the last joint longer than the two preceding, gradually very acutely pointed; prothorax two-fifths wider than long, evidently wider than the head and correspondingly narrower than the elytra, feebly obtrapezoidal, with but slightly arcuate sides, the surface feebly impressed longitudinally near each side, having, parallel with the basal margin, a transverse subimpressed line slightly more advanced at the middle, the median line very faintly impressed; elytra moderately transverse, much longer, as well as wider, than the prothorax, nearly flat, the straight sides feebly diverging from base to apex; abdomen subparallel, not as wide as the elytra. Length 2.7 mm.; width 0.58 mm. Arizona (Walnut), —Wickham.

Distinguishable from *occipitalis* by the denser sculpture and duller lustre, relatively smaller head, which is less enlarged at base or less triangular, with smaller eyes which are at a greater distance from the base, less stout and darker antennæ, less transverse prothorax, longer, relatively narrower and less parallel elytra and by the incised transverse basal line of the pronotum, which is wholly wanting in *occipitalis* and replaced by a transversely oval ante-scutellar impression, not observable in *retrusa*.

Apalonia Csy.

The very minute species of this genus resemble outwardly, to some extent, very much reduced forms of the *fauveli* type of *Myrmedonia*, and there is similarly no trace of infra-lateral cephalic carinæ; the following is an additional species:

Apalonia divisa n. sp.—Rather slender, subcuneiform, convex, highly polished, impunctate, excepting a few fine setigerous punctures, the abdomen with four longitudinal series of punctures bearing longer black setæ, situated at the apices of the tergites; color very pale flavotestaceous, the head and a transverse discal elytral band, interrupted at the suture, darker, piceous, the abdomen, excepting the first two segments, deep black; head moderate, wider than long, parallel and nearly straight at the sides, the eyes small, prominent, at much more than their own length from the base; antennæ rather short, very slender and pale flavate, becoming rapidly thick and blackish apically, having sparse black setæ as in *seticornis* and also *Myrmedonia fauveli*, the third joint not longer than the second and much thinner, four to six longer than wide, seven as long, and the ninth nearly as long, as wide, the tenth moderately transverse, the last symmetrically pointed apically and rather longer than the two preceding; prothorax obtrapezoidal, equal in width

to the head and but slightly wider than long, the basal angles obtuse and rather rounded; base rounded, the surface evenly convex; elytra transverse, with feebly diverging sides, a fourth wider than the prothorax though scarcely longer; abdomen broad, parallel, with arcuate sides, at the middle much wider than the elytra, the margins thin, the tergites short and equal in length. Length 1.5 mm.; width 0.38 mm. Kansas (Mt. Hope).

Differs from *seticornis* in its relatively much broader and, in regard to color, sharply bipartite abdomen, also in its smaller, more parallel head, smaller and more slender antennæ and in other characters.

It is more than probable that *Myrmedonia fauveli*, *angustula* and *recisa* should be generically separated from *Myrmedonia*, because of the total lack of the infra-lateral carinæ of the head distinguishing that genus, in which case such named group could very appropriately come under *Apalonia* as a subgenus.

Trichiusa Csy.

Of this genus there are a very large number of species distributed throughout subarctic North America. *Trichiusa* has a peculiar facies, isolating it from any other American genus and, as far as known to me, it has no closely related European analogue. The following is allied to *monticola:*

Trichiusa columbica n. sp.—Stout, rather convex, compact, wholly black, the legs but little paler; surface rather shining, the micro-reticulation rather coarse and strong, especially on the elytra, feebler on the abdomen; punctures very fine, not dense, indistinct, sparse on the abdomen; pubescence long, coarse and bristling, not dense, dusky; head moderate, convex, impressed on the median line from the centre to the base, wider than long, nearly three-fourths as wide as the prothorax, the eyes small, at much more than their length from the base, the sides straight and parallel, then broadly rounding to the base; antennæ short and stout, bristling with many long stiff hairs, blackish, slightly paler basally, incrassate distally, the first three joints decreasing rapidly, the third obconic, fourth and following transverse, the last ogival; prothorax well developed, short and strongly transverse, almost as wide as the elytral base, the base rounded, the sides parallel and nearly straight, rounding anteriorly, the surface unimpressed; elytra large, moderately transverse, about a fifth wider and two-fifths longer than the prothorax, the humeri just visibly exposed; abdomen fully as wide as the elytra, parallel, narrowing very little apically, with moderately arcuate sides, the tergites short, subequal, the margins well developed. Length 1.5 mm.; width 0.46 mm. British Columbia (Metlakatla),—Keen.

Differs from *monticola*, from northern Idaho, which it otherwise

greatly resembles, in its much larger head, stouter form and more arcuate and more heavily margined sides of the abdomen; the prothorax is not quite so short or transverse.

Group ATHETÆ.

As stated in my paper of last year the scope of this group covers the composite genus *Atheta* of the recent European catalogue of Heyden, Reitter and Weise.

Atheta Thoms.

Subgenus **Stethusa** Csy.

The sternal structure of this section of *Atheta* proper is so distinctive, that the propriety of advancing it to generic rank might be considered legitimate. The habits of the subgenus are wholly stercoraceous so far as observed. The species are very numerous, though closely allied in many parts of the series and especially in the neighborhood of *irvingi*. More careful study of the material in my cabinet indicates the following additional forms, some of which may ultimately be proved to be rather subspecific than specific, though there is but little evidence of this now:

Atheta (**Stethusa**) **clarescans** n. sp.—Subparallel, somewhat shining, piceous-brown, the head and a feeble subapical abdominal cloud blackish, the elytra pale straw-yellow, infumate suturally toward base, the legs very pale; puncture fine, close, even and subasperate, sparser though numerous and very fine on the abdomen, the vestiture short, palish; head transverse, fully three-fourths as wide as the prothorax, the large prominent eyes at a third of their length from the base, the tempora rapidly converging and rounded behind them; antennæ long, gradually feebly incrassate, moderately stout, infumate, the basal joint pale straw-color, the long first and third joints equal in length, the first much the thicker, second distinctly shorter, four to seven evidently longer than wide, the tenth almost as long as wide, the last gradually ogivally pointed and as long as the two preceding; prothorax nearly one-half wider than long, parallel, the sides feebly rounded, more so and more converging apically, the base arcuate, with the angles obtuse and blunt, the surface finely, feebly impressed along the median line, more strongly at base; elytra unusually large, moderately transverse, a fifth wider and nearly a third longer than the prothorax; abdomen parallel, rectilinear, not as wide as the elytra. Length 3.0 mm.; width 0.78 mm. New York (Catskill Mts.).

Allied to *irvingi* but differing in its larger and generally paler elytra, rather longer and less apically incrassate antennæ and in hav-

ing the truncature of the median third of the arcuate apex of the sixth male tergite less defined, its ends not so tumid, the lateral processes long, inwardly arcuate.

Affluens Csy., may, I think, more properly be regarded as a subspecies or variety of *irvingi;* the differences between the two are very slight; it is abundant but cannot be identified with any of the species of Erichson or Melsheimer.

Two males from Asheville, North Carolina, represent a species so closely allied to *irvingi* that it seems not worth while to name it, though the prothorax is materially larger and virtually as wide as the elytral base. *Irvingi* occurs throughout the Hudson watershed at Ithaca, Catskill Mts., western Long Island, Stafford, Conn.—W. E. Britton—and Anglesea, New Jersey. It is perhaps a little larger and heavier on the whole than the variety *affluens*, from the Narragansett region, and with somewhat greater relative development of the head and prothorax.

Atheta (Stethusa) **videns** n. sp.—More slender, deep black, the prothorax not distinctly paler, the elytra and legs as in the preceding, the sculpture and vestiture also nearly similar, though the latter is rather longer and more distinct; head moderate, three-fourths as wide as the prothorax, formed as usual, the antennæ rather long and moderately thick, scarcely incrassate distally, black, pale basally, the second joint shorter than the first or third, fourth longer, the tenth slightly shorter, than wide; prothorax relatively small, fully one-half wider than long, of the usual form otherwise; elytra well developed, with rather strongly diverging straight sides, at apex two-fifths wider, the suture fully a fifth longer, than the prothorax; abdomen rather slender, parallel, with very feebly and evenly arcuate sides, the sixth tergite (♀) very broadly rounded, becoming just visibly sinuato-truncate at apex. Length 3.2 mm.; width 0.76 mm. Rhode Island (Boston Neck).

I obtained a single example of this species about a year ago; it is quite distinct in general appearance, relatively smaller head and prothorax and in its black coloration.

Atheta (Stethusa) **cynica** n. sp.—Rather slender and shining, feebly convex, blackish-piceous, the head black; abdomen black, the apex and the basal segments apically feebly pallescent; punctures fine, disposed as usual; head rather small, slightly transverse, the eyes large; antennæ piceous-black, the basal joint pale, the second joint barely shorter than the third, fourth longer, the tenth evidently shorter, than wide, outer parts gradually very moderately incrassate distally; prothorax rather small, short and transverse, one-half wider than long, parallel, the sides more arcuate anteriorly, nearly straight basally, the median line not at

all impressed, the surface with a feeble transverse ante-scutellar impression; elytra having the usual pallid coloration, with diverging and nearly straight sides, at apex two-fifths wider, the suture nearly a fifth longer, than the prothorax; abdomen narrower than the elytra, parallel, with just visibly arcuate sides and rather thin margins, the sixth tergite (♀) evenly but obtusely rounded at tip. Length 2.6 mm.; width 0.56 mm. Rhode Island (Boston Neck).

A small and unusually slender form, with relatively less developed head and prothorax than usual, as in *videns*, but differing from that species in its much smaller size, shorter prothorax, slightly shorter and more slender antennæ and more narrowly rounded sixth tergite of the female. The head bears about the same proportion to the prothorax in most of the species; when the former is notably small, the latter is also less developed than usual as a rule.

Atheta (**Stethusa**) **cernens** n. sp.—Parallel, moderately convex and shining, blackish-piceous, the head and abdomen black, the elytra of the usual pallid coloration, the sculpture and pubescence fine and rather close as usual; head large, nearly five-sixths as wide as the prothorax, of the usual form and with very large eyes; antennæ piceous, paler basally, of the usual structure, except that the fourth joint is not longer than wide, the fifth and sixth longer than wide, tenth slightly shorter than wide, the second but little shorter than the third; prothorax large, parallel, with rather well rounded sides, the ante-scutellar impression distinct; elytra more parallel than usual, very slightly wider and longer than the prothorax; abdomen parallel, narrower than the elytra, with the usual rather thin side margins. Length 2.75 mm.; width 0.7 mm. Mississippi (Pass Christian).

Closely allied to *irvingi* but differing from any of the preceding in the shorter fourth antennal joint; the male sexual characters are virtually as in *irvingi* and *affluens*.

Atheta (**Stethusa**) **officiosa** n. sp.—Subparallel, moderately convex and shining, piceous-black, the head black; abdomen black, the apex and the apices of the basal segments feebly paler; elytra and legs pale; head very large, almost five-sixths as wide as the prothorax, the eyes large; antennæ long and notably heavy, blackish-piceous, pale basally, gradually and moderately incrassate distally, the second joint almost as long as the third, fourth not longer than wide, the tenth distinctly wider than long and shorter than the ninth; prothorax unusually transverse, three-fifths wider than long, of the usual form, not impressed on the median line, the ante-scutellar impression small and feeble; elytra nearly parallel, only just visibly wider though a fifth longer than the prothorax; abdomen much narrower than the elytra, parallel. Length 2.25 mm.; width 0.5 mm. New York (Catskill Mts.).

Not very closely allied to any other but approaching the *sororella* type in sexual characters, the sixth male tergite having the median projecting lobe truncate medially, nearly half as wide as the apex between the lateral processes, the latter rather short and not projecting posteriorly behind the transverse line of the lobe, the lateral ends of the median lobe not defined by tumid angles but nearly flat and very broadly rounded. This species is also distinguishable by its rather small size, unusually large head, short and broad prothorax and long stout antennæ, with the tenth joint shorter than the ninth.

Atheta (Stethusa) tuta n. sp.—Slender, subparallel, feebly convex, rather shining, dark testaceous, the head piceous; abdomen wholly dark piceous-brown, the elytra very pale albido-flavate, slightly infumate near the scutellum; fine punctures and pubescence as usual; head well developed, slightly transverse, fully three-fourths as wide as the prothorax, the eyes very large as usual; antennæ long, heavy, distinctly incrassate distally, blackish, pale basally, the second joint distinctly shorter than the third, fourth fully as long as wide, ninth and tenth mutually equal in length as usual and nearly as long as wide; prothorax barely one-half wider than long, moderate in size, parallel, with rather well and subevenly rounded sides, the ante-scutellar impression very small, rounded and feeble; elytra nearly parallel, with straight sides, a fifth wider and nearly a fourth longer than the prothorax; abdomen narrower than the elytra, perfectly parallel. Length 2.5 mm.; width 0.45 mm. New York (Ithaca).

Related only to *sororella* and having nearly similar male sexual characters, the median lobe of the sixth tergite occupying fully two-thirds of the space between the lateral spicules, which are rather small, slender, externally arcuate and not projecting posteriorly behind the line of the lobe; the lobe is feebly sinuate medially, with its lateral ends broadly rounded, indefinite and not at all tumid. It differs from *sororella* in its paler coloration, apparently not wholly due to greater immaturity of the unique type, in its rather better developed head, which is not so strongly narrowed at base, in its much less transverse prothorax and longer, more parallel and more albid elytra; the antennæ, also, are longer, heavier and more distally incrassate. As usual throughout the subgenus, the male antennæ bristle with longer hairs inwardly toward base, and the basal joint of the hind tarsi is shorter than the second.

Subgenus **Homalotusa** Csy.

Atheta (**Homalotusa**) **manitobæ** n. sp.—Nearly black to piceous-black throughout, the legs pale, somewhat shining, the micro-reticulation fine but rather strong, not transversely strigilate though somewhat feebler on the abdomen; vestiture moderately long, rather dusky, the punctures very fine, moderately close, numerous and a little more asperate on the abdomen; head small, but little wider than long, two-thirds as wide as the prothorax, the eyes moderately prominent, at a little less than their own length from the base, the tempora behind them slightly less prominent, at first straight and parallel, then rapidly oblique to the base, the carinæ moderate, entire; antennæ long and very slender, piceous-black, barely at all paler basally, very moderately incrassate distally, the first three joints equal in length, the first thickest, fourth much, the ninth slightly, longer than wide, tenth as long as wide, the last scarcely as long as the two preceding, gradually pointed; prothorax two-fifths wider than long, parallel, with feebly arcuate sides, which become a little more rounding and converging at apex; elytra slightly shorter than wide, subparallel, a fourth wider and a third longer than the prothorax; abdomen parallel, with nearly straight thin margins, slightly narrower than the elytra, the fifth tergite a little longer than the fourth. Length 3.3 mm.; width 0.82 mm. Manitoba (Aweme),—Criddle.

A distinct species, perhaps nearest to *oregonina*, but differing in its smaller head, larger prothorax and more slender antennæ.

Atheta (**Homalotusa**) **coloradensis** n. sp.—Rather slender, moderately shining, black or in part slightly picescent, the elytra pale piceous-brown, gradually broadly and very indefinitely infumate suturally except apically, the legs pale; punctures very fine, not dense or asperate, sparser and more asperate on the abdomen, where the micro-reticulation is very fine, feeble and in close wavy transverse strigilation; elsewhere fine, polygonal and moderately strong, the pubescence rather long; head as long as wide, fully two-thirds as wide as the prothorax, parallel and evenly rounded at the sides, the eyes not prominent and at fully their own length from the base, the tempora evenly rounded, gradually converging basally, the carinæ feeble, not quite entire; antennæ long, slender and pale basally, gradually distinctly incrassate and piceous distally, the second joint evidently longer than the third, fourth to sixth longer, seventh to tenth more or less evidently shorter, than wide, the last oval, pointed, not quite as long as the two preceding; prothorax barely a fourth wider than long, parallel, with feebly arcuate sides and rounded base; elytra rather short, nearly a fourth wider, though barely a fifth longer, than the prothorax; abdomen parallel, slightly narrower than the elytra, broader than the prothorax as usual, the fifth tergite a third longer than the fourth, Length 3.85 mm.; width 0.9 mm. Colorado (Red Cliff),—Wickham.

Differs from *mormon* in its more rounded sides of the head, larger but less prominent eyes, thicker and much more incrassate antennæ,

larger prothorax and shorter and paler elytra; it is not closely allied to any other species.

Subgenus **Lamiota** Csy.

This group appears to be confined to the northern Pacific coast fauna, where it is represented by a number of well differentiated species, the two following being about as large as *keeni* though less stout and with a very different form of head:

Atheta (Lamiota) achromata n. sp.—Stout, moderately, the abdomen strongly shining, deep black, the elytra feebly picescent, the legs pale; micro-reticulation strong, not very fine, forming very fine close and feeble transverse strigilation on the abdomen; punctures fine, not dense, asperulate, very fine and sparse on the abdomen, the pubescence palish, rather long and coarse but not dense; head nearly as long as wide, the eyes well developed, moderately convex, at their own length from the base, the tempora behind them rapidly converging and evenly arcuate to the base, the carinæ fine, not quite entire; antennæ black, gradually pale basally, rather long, moderately thick, distinctly incrassate distally, third joint evidently longer and more obconic than the second, the fourth very little longer than wide, the outer joints about a third wider than long, the last gradually pointed from near the base, barely as long as the two preceding; prothorax short, much wider than the head, three-fifths wider than long, parallel, the sides broadly subangulate just before the middle, the base rounded; elytra about a fifth wider, the suture a third longer, than the prothorax, subparallel, transverse; abdomen nearly as wide as the elytra, parallel, slightly narrowing apically, the fourth and fifth tergites equal in length; mesosternal process extending to nearly apical third of the coxæ, where it becomes narrow, parallel and moderately acute, the apex very free, separated from the broadly and obtusely angular metasternal projection by a depressed interval which is half as long as the width of the middle femora. Length 3.0 mm.; width 0.73 mm. British Columbia (Metlakatla),—Keen.

In the male the head is narrowly and feebly impressed along the median line, the impression bifurcating anteriorly, and the pronotum has a large depression occupying median third, from base to near the apex. The head in *keeni* is much larger, parallel at the sides, more transverse, with the shorter tempora as prominent as the eyes, and, in the male, it only has a central foveiform depression of comparatively small size. The sixth tergite in the male of *achromata* is nearly as in *keeni*, being broadly arcuate and strongly, coarsely crenulate between the long arcuate lateral processes, which, in the former, extend posteriorly a little further than the median part.

Atheta (Lamiota) profecta n. sp.—More elongate and parallel, moderately, the abdomen strongly, shining, the transverse fine wavy strigilation of the latter almost obsolete; punctures fine, not close, not asperate, sparse on the abdomen, the vestiture rather long, pale and coarse; color rufo-piceous, the elytra paler and more flavate, the abdomen dark testaceous, with a blackish subapical cloud, the legs pale; head as in the preceding but larger and more transverse, the eyes at their own length from the base, the tempora converging and broadly arcuate behind them to the base, the carinæ fine and subentire; antennæ long, pale piceous, paler basally, gradually moderately incrassate distally, the third joint longer than the second, fourth longer than wide, sixth as long as, and the tenth nearly as long as, wide, the last pointed from near the base and nearly as long as the two preceding; prothorax parallel, more than one-half wider than long, a fourth wider than the head, widest near apical third, where the sides are broadly rounded, straighter basally; elytra only just visibly wider, the suture about a third longer, than the prothorax, the apices sinuato-truncate externally; abdomen slightly narrower than the elytra, parallel throughout, with nearly straight sides, the margins thin, the fourth and fifth tergites equal, the sixth (♂) arcuate and strongly crenate between the lateral processes, which are rather short and thick. Length 3.3 mm.; width 0.76 mm. British Columbia (Metlakatla),—Keen.

Allied to the preceding rather than *keeni*, but differing in the paler coloration, larger head and prothorax and longer and more slender antennæ; the male sexual characters are similar, except that the lateral processes of the sixth tergite are a little shorter and thicker. The head in the male is feebly impressed at the centre of the upper surface, the pronotum broadly and moderately impressed along the median line from apex to base, but without the broad depression of *achromata* and *keeni*.

The following species is much smaller and differs in sculpture and sexual characters:

Atheta (Lamiota) concessa n. sp.—Stout, subparallel, rather strongly shining, the reticulation fine, moderately strong, large but feeble and polygonal throughout the abdomen, the punctures relatively closer and more asperate than in the two preceding, the pubescence nearly similar but closer; color deep black, the elytra dark piceous-brown, feebly infumate extero-posteriorly and suturo-basally, the legs pale; head well developed, wider than long, parallel at the sides, the eyes feebly convex, at fully their own length from the base, the equally prominent tempora parallel and straight, then abruptly very oblique to the base, the carinæ fine, not quite entire; antennæ black, slightly pale basally, moderate in length, gradually and rather strongly incrassate, the second and third joints subequal, fourth scarcely longer than wide, the outer joints rather strongly transverse, the last longer than the two preceding; prothorax

short and transverse, a fourth wider than the head, rounded at base, the sides parallel and feebly arcuate, becoming gradually more arcuate and converging anteriorly; elytra large, not quite as long as wide, very slightly wider, the suture one-half longer, than the prothorax; abdomen as in *achromata*, except that the sixth tergite (♂) is rectilinearly truncate, the truncature only very feebly subcrenulate and the lateral angles marked, not by long processes, but simply by flat angulation which scarcely extends posteriorly further than the truncature; mesosternal parts nearly as in the two preceding; basal joint of the hind tarsi almost as long as two, three or four, which are equal. Length 2.4–2.6 mm.; width 0.65–0.7 mm. British Columbia (Metlakatla),—Keen.

The head in the male is broadly and moderately concave almost throughout the upper surface, the pronotum with a large concavity from apex to base, in rather more than median third.

Subgenus **Delphota** Csy.

The species of this subgenus have a peculiar parallel form of body, rather close-set punctures and pubescence and some other features that recall such groups as *Stethusa* and *Metaxya*, but they are less elongate, have an aciculate mesosternal process and slightly separated middle coxæ, and are evidently to be included as a part of *Atheta* in its narrower sense. The following six species are to be listed, in addition to the one named *cephalina* in my previous paper and which is represented at present by the single male type:

Atheta (Delphota) lymphatica n. sp.—Parallel, moderately stout, somewhat shining, the elytra more and the abdomen most strongly so, the micro-reticulation fine and rather strong anteriorly, coarser and more feeble on the elytra and abdomen, rather transverse in form but not strigilate on the latter; punctures fine, rather close and asperulate; pubescence pale, short, rather coarse; color blackish-piceous, the head and abdomen black, the elytra brown, the legs pale; head well developed, transverse, parallel, the eyes slightly convex, at less than their own length from the base, the tempora almost equally prominent, straight and parallel, then rounding into the base, the carinæ fine, far from entire; antennæ moderately long, black, palish basally, strongly incrassate, the third joint slightly longer than the second, fourth as long as wide, fifth a fourth, the tenth one-half, wider than long, the last gradually pointed from near the base and longer than the two preceding; prothorax large, one-half wider than long, two-fifths wider than the head, parallel, with feebly arcuate sides, which become more rounded and converging apically; elytra large, subquadrate, but little widest at apex and only a little shorter than wide, just visibly wider, the suture impressed at base and about a third longer, than the prothorax; abdomen narrower than the elytra, parallel, the fourth and fifth tergites equal; metasternum not

prolonged between the coxæ, feebly and obtusely cuspidulate medially and separated by a very long interval from the finely aciculate mesosternal process, the coxæ very narrowly separated; hind tarsi slender, the basal joint a little shorter than the second. Length 2.8 mm.; width 0.73 mm. Iowa (Cedar Rapids),—Brendel.

The female types of this species were included under *cephalina*, but a more careful inspection shows that this is not correct, the antennæ being longer, with the fourth joint longer and the elytra larger and more quadrate. The eyes in the following species are relatively a little larger:

Atheta (Delphota) regenerans n. sp.—Coloration and sculpture nearly as in the preceding, smaller in size and more slender; head transverse, fully three-fourths as wide as the prothorax, the eyes rather convex, large, slightly more prominent than the straight and parallel tempora behind them and almost twice as long, the carinæ scarcely entire; antennæ rather short and stout, very strongly incrassate, piceous, paler basally, the second and third joints subequal, not much elongated, less than twice as long as wide, fourth distinctly, the outer joints strongly, transverse, the ninth almost twice as wide as long, the tenth not quite so short, the last conoidal, barely as long as the two preceding; prothorax large, not quite one-half wider than long, strongly rounded at base, parallel and feebly arcuate at the sides, the latter rather straighter basally, the angles very obtuse but distinct, the median line finely and feebly impressed; elytra rather short and transverse, not wider, the suture just visibly longer, than the prothorax; abdomen rather narrow, distinctly narrower than the prothorax and elytra, parallel, narrowing perceptibly apically, with thin margins, the fifth tergite two-fifths longer than the fourth; mesosternal process very aciculate, separated from the angulate metasternal projection by a much shorter interval than in the preceding and not exceeding a third of the thickness of the middle femora. Length 2.25 mm.; width 0.55 mm. Iowa (Cedar Rapids),—Brendel.

Differs greatly from *lymphatica* and *cephalina* in its larger eyes, shorter and stouter antennæ, broader prothorax and decidedly in the structure of the intermesocoxal parts and in the apically narrowed as well as more slender abdomen.

Atheta (Delphota) perspicua n. sp.—Parallel and moderately convex, somewhat shining, the abdomen more strongly, the micro-reticulation small, not strong, very feeble but not very fine and subtransverse on the abdomen; punctures very fine, not very asperate, close-set, sparse on the abdomen, the pubescence pale and distinct; color blackish-piceous, the elytra wholly pale tawny, the apex and apical parts of the basal segments of the abdomen pale, the legs pale; head almost as long as wide, nearly three-fourths as wide as the prothorax, parallel and evenly,

moderately rounded at the sides, the eyes not prominent, well developed but at their own length from the base, the carinæ fine and not quite entire; antennæ long, gradually moderately incrassate, piceous-brown, slightly paler basally, the second joint longer than the third, the latter much elongated, fourth distinctly longer than wide, the outer joints very moderately transverse, the last ovally pointed and as long as the two preceding; prothorax less than a third wider than long, parallel, with evenly and very moderately rounded sides and rounded base, the median line distinctly impressed from near the apex to the base; elytra slightly shorter than wide, with just visibly diverging and nearly straight sides, at base but slightly, at apex more noticeably, wider, the suture impressed at base and a third longer, than the prothorax; abdomen perfectly parallel, with nearly straight and rather thin margins, slightly narrower than the elytra, the fifth tergite barely at all longer than the fourth; hind tarsi not very long or thin, the basal joint almost as long as the second. Length 2.5 mm.; width 0.68 mm. New Jersey.

The female type has the sixth tergite broad and very broadly, feebly arcuate at apex, the sixth ventral plate large and semicircular. At first sight this species greatly resembles a *Stethusa*, but the middle coxæ are only narrowly separated and the mesosternal process very slender and gradually aciculate, showing that there is no close relationship, as might be inferred also from the much smaller eyes.

Atheta (Delphota) logica n. sp.—Rather stout, parallel, moderately convex, the lustre, sculpture and vestiture nearly as in the preceding, the coloration also virtually similar; head more transverse, the sides parallel, rounded basally, the eyes not prominent, at their own length from the base, the carinæ fine, feeble and irregular; antennæ moderately long, gradually strongly incrassate and thick distally, piceous, gradually pale flavate basally, the second and third joints only moderately elongate and equal, fourth slightly longer than wide, the outer joints about a fourth wider than long, the last gradually pointed from near the base and a little longer than the two preceding; prothorax two-fifths wider than long and two-fifths wider than the head, parallel, with moderately and subevenly rounded sides, rather more converging at apex, the median line wholly unimpressed but with a very faint ante-scutellar impression; elytra distinctly shorter than wide, at base very slightly wider than the prothorax, the suture a fourth to nearly a third longer; abdomen nearly as in the preceding species, except that it is slightly though very perceptibly narrowed apically; middle coxæ narrowly separated, the mesosternal process gradually becoming very acute and extending to their apical third, where it is separated from the well developed triangular metasternal projection by barely a third of the femoral width. Length 2.0–2.2 mm.; width 0.58–0.68 mm. Pennsylvania (near Philadelphia).

The sixth tergite of the female is transversely subtruncate at tip, with moderately rounded angles. This species is distinguishable

readily from *perspicua* by its relatively stouter form, slightly longer vestiture, more transverse head, rather less elongate and somewhat more incrassate antennæ, with the second and third joints equal and shorter, by its more transverse prothorax, with unimpressed median line, and other structural features.

Atheta (Delphota) delumbis n. sp.—Small, less parallel, the lustre and sculpture almost similar, the micro-reticulation of the abdomen rather large but feeble and irregular; color pale piceo-rufous, the head black, the elytra pale tawny-yellow, the abdomen dark rufo-piceous, with a large black subapical cloud and pale flavate apex, the legs pale; pubescence pale, moderately long and distinct; head large, almost five-sixths as wide as the prothorax, transverse, the eyes well developed and somewhat prominent, at much less than their own length from the base, the carinæ apparently strong and entire; antennæ rather short, piceous, paler basally, moderately stout but subparallel distally, the second and third joints equal, fourth slightly, the outer joints one-half, wider than long, the last gradually ogivally pointed and as long as the two preceding; prothorax two-fifths wider than long, parallel, with rather well rounded sides, somewhat narrowing anteriorly, the base rounded, the surface not evidently impressed; elytra distinctly shorter than wide, subparallel, a little wider and not quite a third longer than the prothorax, the apices as in the preceding and not sinuate externally; abdomen much narrower than the elytra, parallel, with very feebly arcuate sides and thin margins, the fifth tergite only very slightly longer than the fourth. Length 1.7 mm.; width 0.55 mm. New Jersey.

Very distinct from the two preceding and more properly perhaps a true *Atheta;* it differs in the shorter antennæ, with transverse and not elongate fourth joint, much smaller size, narrower abdomen and in the less narrowly separated middle coxæ, with the mesosternal process gradually acute and extending to their apical third, but less finely aciculate though sharply pointed and very free at tip.

Atheta (Delphota) callens n. sp.—Subparallel, moderately convex, shining, finely and asperulately but rather loosely punctate, sparsely and more finely on the abdomen; pubescence unusually long, palish; color blackish-piceous, the head black, the elytra paler tawny-red throughout, the abdomen very dark testaceous, blackish posteriorly except at tip, the legs pale; head transverse, parallel, rather more than three-fourths as wide as the prothorax, the eyes moderately convex, at their own length from the base, the tempora equally prominent, straight and parallel, abruptly rounding at base, the carinæ very feeble and extending barely to the middle; antennæ rather short and stout, blackish, paler basally, gradually rather strongly incrassate, the second and third joints subequal, only moderately elongate, fourth distinctly, the outer joints fully one-half, wider than long, the last ogivally pointed and fully as

long as the two preceding; prothorax a third wider than long, parallel, the sides slightly rounded before the middle, gradually straighter posteriorly, the base rounded, the surface unimpressed; elytra distinctly shorter than wide, with evidently diverging and nearly straight sides, at base very little, at apex distinctly, wider, the suture broadly impressed basally and fully a fourth longer, than the prothorax, the apices feebly sinuato-truncate externally; abdomen parallel, with strongly and evenly arcuate sides, at the middle about as wide as the elytra, the fourth and fifth tergites equal and each longer than those more basal, the micro-reticulation small, transverse though not strigiliform. Length 2.3 mm.; width 0.63 mm. District of Columbia.

Allied to the last but larger and with peculiar outline of the abdomen and notably long, though somewhat sparse, rather shaggy pubescence.

The following species is provisionally appended to this subgeneric group but will probably have to be removed ultimately:

Atheta (Delphota) oscitans n. sp.—Subparallel, rather feebly convex, somewhat shining, finely, not asperately or closely punctate, the abdomen with numerous though not close-set fine punctures and with the micro-reticulation distinct and subtransverse though not strigiliform; pubescence rather long, palish; color blackish-piceous, the elytra rufescent broadly toward the humeri, the abdomen faintly paler at tip and the legs pale red-brown; head large, fully three-fourths as wide as the prothorax, nearly as long as wide, the eyes moderate but convex and prominent, at more than their own length from the base, the tempora less prominent, straight and parallel for some distance, then broadly rounding to the base, the carinæ fine and far from entire; antennæ blackish throughout, rather long, gradually distinctly incrassate, the long second and third joints subequal, fourth much longer, the tenth but very little shorter, than wide, the last pointed apically, not as long as the two preceding; prothorax rather short, more than one-half wider than long, rather widest before the middle, where the sides are broadly rounded, gradually straighter basally, the base rounded, the surface not evidently impressed; elytra distinctly transverse, with nearly straight diverging sides, at base but slightly wider, the suture nearly a third longer, than the prothorax; abdomen slightly narrower than the elytra, perfectly parallel, with nearly straight sides, the fifth tergite barely longer than the fourth; middle coxæ narrowly separated, the very acute and slender mesosternal process not extending quite to their apical third. Length 2.5 mm.; width 0.72 mm. California (Siskiyou Co.).

The antennæ, having an unusually elongate fourth joint, will distinguish this species readily from the two preceding, and the form of the head and more prominent eyes are also peculiar features.

Subgenus **Atheta** Thoms.

This section, as considered here and in my previous paper, comprises a good many subgroups definable principally by differences in the type of male sexual characters at the abdominal apex; many of these groups have been given distinctive generic or subgeneric names by Rey in his patient and careful treatment of the fauna of France. To segregate our species with the minute thoroughness bestowed by Rey upon that comparatively restricted region, would however require time and patience far beyond the resources of the writer, for the fauna of France is in all probability not so extensive or diversified in the Aleocharinæ as that of the single state of California, or that of New England, these two regions also possessing but extremely few species in common.

The following is peculiar in its very small eyes and it may therefore not belong strictly to the true typical *Atheta*, though having completely the general facies of the subgenus:

Atheta franklini n. sp.—Rather stout, moderately convex, shining black, the abdomen feebly pallescent at tip, the elytra evenly castaneous, the legs pale brown; micro-reticulation fine, unusually large on the elytra, the abdomen with very fine though not very close-set wavy transverse strigilation; punctures rather sparse, asperate but not dense on the elytra, sparse and strongly asperate on the abdomen; pubescence rather long and coarse, sparse and slightly pale; head large, wider than long, almost four-fifths as wide as the prothorax, the eyes convex, at evidently more than their own length from the base, the tempora parallel and swollen slightly beyond the line of the eyes, strongly arcuate, the carinæ feeble, not quite entire; antennæ extending nearly to the middle of the elytra, black, piceous basally, gradually distinctly incrassate, the second joint barely longer than the third, both shorter than the first, fourth nearly as long as wide, outer joints transverse, one-half wider than long, the last conoidal, longer than the two preceding; prothorax well developed, two-fifths wider than long, subparallel, widest rather before the middle, the sides broadly, feebly arcuate, becoming straighter basally, the angles slightly obtuse and rather blunt, the ante-scutellar impression obsolescent, the median line not impressed; elytra rather transverse, with slightly diverging sides, at base just visibly wider, the suture scarcely a fourth longer, than the prothorax, the flanks extending posteriorly a little further than the median parts; abdomen slightly narrower than the elytra, parallel, gradually perceptibly tapering posteriorly, the fifth tergite equal in length to the fourth; surface very faintly rufescent basally; hind tarsi with the first four joints subequal, the first very slightly shorter than the second; middle coxæ evidently separated, the mesosternal process gradually acuminate, extending but slightly beyond their middle, its apex moderately separated from the acute apex of the rather long and

angulate metasternal projection by a moderately depressed and rather narrowly convex ridge. Length 2.5 mm.; width 0.7 mm. Pennsylvania (Buena Vista Spring, Franklin Co.).

The four examples before me, which I took in August last, appear to be females; the antennæ when contracted are but little longer than the head and prothorax.

The following species is distinguishable by its large prothorax, heavy antennæ and unusually short elytra:

Atheta postulans n. sp.—Rather stout, subparallel and convex, black, the elytra dark red-brown to piceous, the legs pale; punctures fine, well separated, asperulate, especially on the elytra, fine and remote on the abdomen; pubescence rather coarse, unusually long, erect or nearly so and bristling; micro-reticulation rather large but not strong, finer and subtransverse on the abdomen; head nearly four-fifths as wide as the prothorax, slightly transverse, parallel, the eyes at more than their own length from the base and not very convex, the tempora straight and parallel, then rounded, not less prominent than the eyes, the carinæ fine and not entire; antennæ black, paler basally, notably long but stout and gradually strongly incrassate, the second joint longer and more cylindric than the third, fourth distinctly, the outer joints fully one-half, wider than long, the last oval, conically pointed, as long as the two preceding; prothorax two-fifths wider than long, parallel, with moderately and subevenly arcuate sides and rounded base, the surface unusually convex, with a feeble transverse ante-scutellar impression; elytra strongly transverse, at base but very little, at apex more distinctly, wider, the suture not longer, than the prothorax, the apices transverse externally; abdomen broad, parallel, with very feebly arcuate sides, about as wide as the elytra, feebly narrowing posteriorly, the fourth and fifth tergites equal; margins thin; middle coxæ slightly separated, the acute mesosternum moderately distant from the angulate metasternum; basal joint of the hind tarsi shorter than the second. Length 2.25 mm.; width 0.65 mm. British Columbia (Metlakatla),—Keen.

Two of the examples before me have the sixth segment much retracted, but with the ventral plate evidently somewhat narrow and subparabolic; the third is a female, with the sixth ventral broader and circularly rounded.

The following is allied to *postulans* but has longer elytra:

Atheta apposita n. sp.—Rather stout, strongly shining, the sculpture nearly as in the preceding but with the punctures still more remote, very fine and sparse on the pronotum; color deep black, the elytra very dark rufo-piceous, the legs blackish, paler distally; pubescence not so long or conspicuous as in the preceding; head nearly as long as wide, two-thirds to three-fourths as wide as the prothorax, parallel, the eyes rather large but not notably prominent, the tempora forming a broad

subeven circular converging arc to the base and as long as the eyes, the carinæ fine, strong but not entire; antennæ rather long, thick, gradually strongly incrassate, black, scarcely paler basally, the third joint as long and thick as the second but strongly and evenly obconic, the fourth nearly as long as as wide, the outer joints fully one-half wider than long, the last obtuse, as long as the two preceding; prothorax barely two-fifths wider than long, parallel, with subevenly and moderately rounded sides and rounded base, not impressed; elytra feebly transverse, at base fully a fifth, at apex more than two-fifths, wider, the suture a third longer, than the prothorax; abdomen slightly narrower than the elytra, with feebly arcuate sides, only just visibly narrowed apically, the fifth tergite shorter than the fourth; middle coxæ well separated, the mesosternal process less acute than in the preceding and separated from the shorter and broader metasternal angle by a much longer interval. Length 2.3 mm.; width 0.72 mm. British Columbia (Metlakatla),—Keen.

Differs from *postulans* in the more orbicular head, larger third and longer fourth antennal joints, relatively smaller prothorax, much sparser punctures, shorter fifth tergite and different intermesocoxal structure. Sexual characters are not clearly determinable in my two examples.

The two following species have, like *brumalis* and *carlottæ*, remarkably developed elytra and sexually different antennæ, and the small group is peculiar in all probability to the northern Pacific coast fauna:

Atheta wrangelica n. sp.—Nearly similar in form, coloration and sculpture to *brumalis* Csy., the asperate punctures closer throughout, finer and much less close on the abdomen, which is finely strigilate in close-set transverse wavy lines, the pubescence nearly similar; head slightly transverse, rather more than three-fourths as wide as the prothorax, the eyes moderately large, at fully two-thirds of their own length from the base, the tempora less prominent, forming an even rounded converging arc behind them to the base, the carinæ very feeble and far from entire; antennæ (♀) better developed than in *brumalis*, rather long, very moderately incrassate, the third joint longer than the second, fourth distinctly longer, the tenth but slightly shorter, than wide; prothorax nearly as in *brumalis* but with the parallel sides subevenly and very moderately arcuate throughout the length, the surface with a very small and feeble rounded impression just before the scutellum; elytra almost as long as wide, at base nearly two-fifths, at apex almost one-half, wider, the suture one-half longer, than the prothorax; abdomen parallel, with nearly straight sides, narrower than the elytra, the fourth and fifth tergites equal; hind tarsi slender, with very long stiff setæ, the basal joint a little shorter than the second. Length 2.4 mm.; width 0.74 mm. Alaska (Fort Wrangel),—Wickham.

The single female of this species now at hand represents a species

closely allied to *brumalis* but having the antennæ longer, with the joints distally very much less transverse than in the female of that species, in this respect resembling more nearly the female of *carlottæ*, the punctuation denser, the head smaller and less transverse and the eyes distinctly less developed.

The antennæ are notably longer and heavier in the male of *brumalis* than in the female, though similar in general structure.

Atheta sumpta n. sp.—Stout, rather shining, the punctures close-set and strongly asperate, finer and sparser on the head and abdomen, the latter polished, with the micro-reticulation rather large and irregularly polygonal; pubescence rather short and coarse, palish; color deep black, the elytra fusco-testaceous, becoming black suturally toward base and postero-externally, the legs pale; head large, transverse, three-fourths as wide as the prothorax, the eyes at their own length from the base, the tempora equally prominent, parallel and almost straight nearly to the base, there rapidly rounding, the carinæ fine, not entire; antennæ (♀) short, black, gradually pale and slender basally, rapidly and strongly incrassate distally, the second and third joints equal, fourth not longer than wide, the fifth barely wider than long, the outer joints rapidly larger, becoming strongly transverse, the last longer than the two preceding; front with a strong rounded central impression; prothorax large, three-fifths wider than long, parallel and evenly rounded at the sides, broadly and feebly impressed centrally; elytra shorter than usual, transverse, with diverging and nearly straight sides, at base just visibly wider, at apex distinctly wider, the suture nearly one-half longer, than the prothorax; abdomen parallel, with feebly arcuate sides and rather strong margins, evidently narrower than the elytra. Length 2.35 mm.; width 0.75 mm. British Columbia (Metlakatla),—Keen.

The female type was received from Mr. Keen only a few weeks ago; it differs from the female of *brumalis* in its slightly shorter and more rapidly incrassate antennæ, with the fourth joint shorter, in its much larger head and prothorax, shorter elytra and stronger asperate punctures of the pronotum and elytra.

The following eleven species are more or less small and pallid fungus-loving forms, allied to *comitata*, *elota* and *gnoma*, and the first three are distinguished by a peculiar form of the head, with relatively more anterior eyes:

Atheta kansana n. sp.—Moderately slender and convex, highly polished, the micro-reticulation obsolete, barely traceable and polygonal toward the abdominal apex, the punctures minute, sparse, not at all asperate, the vestiture rather long but sparse; color pale testaceous, the head and abdomen, except at tip, blackish, the legs very pale; head as long as wide, four-fifths as wide as the prothorax, the eyes prominent, at a little

more than their own length from the base, the tempora less prominent, straight and parallel for a long distance, then broadly rounding to the base, the carinæ distinct but not extending beyond the middle; antennæ rather long and heavy, dark, paler basally, the second and third joints subequal, fourth and fifth about as long as wide, the remainder missing in the type; prothorax unusual in the genus, only about a fifth wider than long, parallel and with evenly, very moderately rounded sides and broadly arcuate base, unimpressed; elytra a little shorter than wide, more than a fourth wider, the suture two-fifths longer, than the prothorax, the apices externally broadly truncate; abdomen parallel, very slightly narrowing apically, much narrower than the elytra, the fifth tergite a little longer than the fourth, the sixth (♂) transversely truncate at tip, the truncature only very minutely and feebly uneven and with simple obtuse angles at the sides; interval between the mesosternal process and the broadly angulate metasternum unusually long, depressed. Length 2.7 mm.; width 0.7 mm. Kansas (Sedgwick Co.).

Distinguishable at once by its coloration, sculptureless surface, narrow head and prothorax and male sexual characters.

Atheta rusticula n. sp.—Much smaller, somewhat slender and only slightly convex, rather shining, the abdomen polished, the micro-reticulation large, distinct, large and transversely polygonal on the abdomen; punctures fine, asperulate, somewhat close-set, sparse on the abdomen, the vestiture fine, pale, moderately close anteriorly; color testaceous, the head a little darker, the elytra paler and more flavate, uniform throughout, the abdomen gradually blackish posteriorly, the legs very pale; head only slightly wider than long, fully three-fourths as wide as the prothorax, the eyes moderately convex, at three-fourths their length from the base, the tempora equally prominent, parallel for a short distance behind the eyes, the carinæ fine and far from entire; antennæ infuscate, paler and slender at base, rather short, gradually strongly incrassate, the second joint longer than the third, which is twice as long as wide and obconic, fourth distinctly wider than long, the tenth nearly twice as wide as long, the last conoidal and longer than the two preceding; prothorax two-fifths wider than long, parallel, the sides moderately rounded, the median line finely impressed basally and joining a feeble ante-scutellar impression; elytra much shorter than wide, the sides feebly diverging, very little wider and barely a fifth longer than the prothorax; abdomen slender, abruptly much narrower than the elytra, parallel, with nearly straight sides, the fourth and fifth tergites equal, longer than the others. Length 1.7 mm.; width 0.48 mm. New York (Catskill Mts.).

The female type of this very small species has the sixth tergite rounded at tip; it may be compared with *nympha* Csy., but has a relatively longer head, shorter elytra and narrower abdomen.

Atheta limulina n. sp.—Slender, moderately convex, shining, the ground sculpture as in the preceding, the punctures minute and rather

sparse, stronger and asperulate though not dense on the elytra, very fine and remotely scattered on the abdomen; color piceous, the head and the abdomen, except gradually toward base, blackish, the elytra paler, uniform dusky-flavate; head very nearly as long as wide, three-fourths as wide as the prothorax, parallel and not rounded at the sides, the eyes at very nearly their own length from the base, the carinæ and antennæ nearly as in *rusticula;* prothorax nearly one-half wider than long, the sides parallel and rounded but more convergent anteriorly, the median line finely but strongly striiform almost throughout the length; elytra moderately short, only very slightly wider and about a fourth longer than the prothorax; abdomen nearly as in the preceding, except that the fifth tergite is not quite as long as the fourth. Length 1.7 mm.; width 0.43 mm. Rhode Island (Boston Neck).

The peculiarly elongate head, relatively more anterior eyes and small size of the body will probably render the identification of this species quite certain.

Atheta catula n. sp.—Stouter, subparallel, rather convex, wholly pale flavo-testaceous, the subapical cloud of the abdomen very faint; microreticulation large, polygonal, distinct; punctures fine, not dense ,unusually strong, asperate and moderately close on the elytra; head moderately transverse, large, nearly four-fifths as wide as the prothorax, the eyes at two-thirds their length from the base, the tempora about equally prominent, the fine carinæ far from entire; antennæ rather short, slender and pale basally, very stout, subfusiform and blackish from the distinctly transverse fourth joint to the apex, the second and third joints subequal, the last gradually pointed and much longer than the two preceding; prothorax rather more than one-half wider than long, parallel and rounded at the sides, the median line striiform; elytra large, slightly shorter than wide, with feebly diverging and nearly straight sides, only just visibly wider but nearly one-half longer than the prothorax; abdomen much narrower than the elytra, parallel, the fourth and fifth tergites subequal, the latter with uneven longitudinal corrugations. Length 1.8 mm.; width 0.55 mm. New York (Catskill Mts.).

This species is peculiar in its very stout and faintly fusiform antenna and unusually large elytra for this section of the genus.

Atheta candidula n. sp.—Rather stout and only feebly convex, shining, finely, asperately and closely punctate, rather sparsely on the abdomen, where the micro-reticulation becomes compressed into somewhat wavy transverse lines posteriorly; pubescence short, pale, abundant, longer and sparse on the abdomen as usual; color pale piceo-testaceous, the head slightly darker, the elytra very pale, albido-flavate, with very small feeble infumation about the scutellum, the abdomen blackish posteriorly except at apex and at the apices of the segments; head large, transverse, fully four-fifths as wide as the prothorax, the eyes large, prominent, at one-half their length from the base, the carinæ fine, not quite entire; antennæ with the first four joints slender and pale, sparsely setose, the

remainder moderately stout, fuscous and densely puberulent, the second and third joints equal, fourth very little wider than long, the outer joints one-half wider than long, the last narrowly oval, pointed, barely as long as the two preceding; prothorax short and wide, three-fifths wider than long, parallel and rounded at the sides, the median line feebly impressed, joining a small feeble ante-scutellar impression; elytra large, flat, moderately short, subparallel, about a fifth or sixth wider and nearly one-half longer than the prothorax; abdomen rather wide, slightly narrower than the prothorax, parallel, with nearly straight sides, the fourth and fifth tergites equal. Length 1.9 mm.; width 0.6 mm. New York (Catskill Mts.).

Allied to *gnoma* but stouter, with larger head and still more developed and prominent eyes, larger, less transverse, flatter and more albid elytra and broader abdomen.

Atheta diffisa n. sp.—Much less stout, more parallel and more convex, shining, the punctures asperulate and rather close-set, finer and sparser on the abdomen, where the reticulation is polygonal and rather large; pubescence rather short, pale; color piceous-black, the head black, the elytra pale luteo-flavate, with the outer apical angles and suture blackish and the abdomen black, the first two segments evidently, and apex very faintly, paler, the legs pale; head large, transverse, nearly four-fifths as wide as the prothorax, the eyes prominent, at half their length from the base, the tempora less prominent but rather tumid, the fine carinæ entire; antennæ moderate, piceous, pale basally, moderately stout, the second joint longer than the third, which is strongly obconic and less than twice as long as wide, fourth distinctly transverse, the tenth about two-thirds wider than long, the last gradually pointed and as long as the two preceding; prothorax nearly as in the preceding, except that it is smaller and with the median line only obsoletely subimpressed; elytra much shorter than wide, not flat, the sides feebly diverging, only very slightly wider but a third longer than the prothorax; abdomen distinctly narrower than the elytra, parallel, the fifth tergite fully a third longer than the fourth; sixth (♂) with a feeble median sinus at apex, limited at the sides by broadly rounded and very feeble tumid angles, each of which is separated from the large but feeble and broadly rounded ear-like lateral process by a feeble sinus, not half as wide as the median sinus. Length 1.75 mm.; width 0.53 mm. New York (Catskill Mts.).

This species is also allied to *gnoma*, differing in its smaller but rather more incrassate antennæ, with more transverse joints, in its shorter elytra and much more broadly rounded lateral ear-like processes of the sixth male tergite; also in the more narrowly parabolic sixth ventral plate of that sex.

Atheta nata n. sp.—Very small, rather slender and but feebly convex, subparallel, slightly shining, the abdomen polished and with the rather large micro-reticulation somewhat transverse; punctures fine, asperulate,

rather well separated even on the elytra, sparse on the abdomen, the vestiture short, pale, not conspicuous; color very dark rufo-piceous, the head and abdomen blackish, the latter paler basally and at apex, the elytra pale, albido-flavate almost throughout; head large, transverse, fully four-fifths as wide as the prothorax, the eyes prominent, at two-thirds their length from the base, the tempora converging in even circular arc behind them to the base, the carinæ fine, entire; antennæ rather small, slender and pale basally, moderately incrassate and dark thence to the tip, the second and third joints equal in length, the latter slender and pedunculate basally, fourth distinctly wider than long, the outer joints rather strongly transverse, the last fully as long as the two preceding; prothorax short, nearly as in the preceding but without median impression of any kind; elytra moderately short, with feebly diverging straight sides, but very slightly convex, at base slightly, at apex about a fourth, wider than the prothorax, the suture two-fifths longer; abdomen slightly narrower than the elytra, perfectly parallel and with straight sides, the fifth tergite barely as long as the fourth. Length 1.6 mm.; width 0.45 mm. Rhode Island (Boston Neck).

Distinguishable by its very small size, rather slender form, large head, coloration and other characters; it is of the *gnoma* type like the two preceding.

From the suburbs of Philadelphia I have before me a male, which cannot be distinguished in any tangible way from *comitata*, though rather smaller and less stout; the sixth ventral plate is circularly rounded and not narrower and distinctly parabolic, as it is in *gnoma*. *Comitata* and *gnoma* are closely allied but differ in many minor directions, as well as in the form of the sixth male ventral; the following, however, though belonging to the same group as *gnoma*, *comitata* and the three preceding, differs in its much smaller head, wherein it resembles more closely *nympha*, which however has a crenulate sixth male tergite:

Atheta modiella n. sp.—Coloration and sculpture as in *gnoma*, the form more slender; head less developed, though fully three-fourths as wide as the prothorax, the eyes large, rather prominent, the tempora three-fifths as long, the carinæ entire; antennæ moderate in length, not very incrassate, dusky, pale basally, the second and third joints subequal, less than twice as long as wide, four moderately transverse, the outer joints not more than one-half wider than long, the last as long as the two preceding; prothorax barely one-half wider than long, parallel and rather feebly rounded at the sides, the latter more rounding and converging anteriorly, the base rounded with the angles obtuse and evidently rounded, the median line finely impressed to a little beyond the middle; elytra not very short, subparallel, with straight sides, slightly wider and a third longer than the prothorax; abdomen distinctly narrower than the elytra, parallel,

with straight sides, the fifth tergite but little longer than the fourth, the sixth (♂) with sexual characters similar to those of *gnoma*, the sixth ventral, however, much more broadly rounded and less distinctly parabolic than in that species. Length 2.0 mm.; width 0.54 mm. Rhode Island (Boston Neck).

The species with which this seems to have the closest affinity is probably *gnoma*, but it differs in its narrower form of body and evidently smaller head; from *comitata* it differs in its relatively still more slender form, smaller head, less transverse and more parallel elytra, and, from *nata*, in its larger size, smaller head and much more developed antennæ; the latter character also distinguishes it from *diffisa*.

Atheta villica n. sp.—Subparallel, moderately convex, shining, the micro-reticulation feeble but everywhere polygonal, the punctures fine, moderately close, very sparse on the abdomen; pubescence distinct, subdecumbent, rather long but sparse on the abdomen; color blackish throughout, the abdominal tip and the elytral humeri testaceous; under surface paler, the legs very pale; head moderate, fully two-thirds as wide as the prothorax, the eyes large, at about half their length from the base, the carinæ fine, entire; antennæ short, infuscate and rapidly strongly incrassate distally, very slender and pale basally, the second joint as long as the first and very much longer than the third, fourth almost as long as wide, the tenth nearly twice as wide as long, the last relatively unusually large, ogivally acute and almost as long as the three preceding; prothorax less than one-half wider than long, parallel, the sides feebly arcuate, more rounding anteriorly, the base rounded, the surface unimpressed; elytra large, slightly shorter than wide, with very feebly diverging and almost straight sides, at base very slightly wider, the suture fully two-fifths longer, than the prothorax; abdomen parallel, much narrower than the elytra, the fifth tergite slightly longer than the fourth and trapezoidal. Length 1.8 mm.; width 0.5 mm. Pennsylvania (near Philadelphia).

A very distinct species, differing from any of the preceding in coloration and in antennal structure. The type is a female, having the fifth tergite very broadly rounded.

Atheta amens n. sp.—Very small, rather convex, shining, with fine asperulate and only moderately close punctures, very sparse on the abdomen, where the feeble reticulation is transversely polygonal, the pubescence not conspicuous; color rather pale piceous, the head darker; elytra much paler, wholly tawny flavate, the abdomen with a large subapical black cloud, the legs pale; head well developed, three-fourths as wide as the prothorax, evidently transverse, with parallel rounded sides, the eyes moderately convex and at about their own length from the base; antennæ thick, rather short, not very rapidly incrassate and blackish

distally, pale and still notably stout basally, the first joint strongly compressed, much longer than the second, the third short, distinctly shorter than the second, obconic and less than one-half longer than wide, fourth strongly transverse, the tenth not quite twice as wide as long, the last large, ogivally pointed, much longer than the two preceding; prothorax nearly three-fifths wider than long, the sides parallel and strongly, subevenly arcuate, the base rounded with the angles very obtuse and rounded, the surface wholly unimpressed; elytra moderately short, with straight diverging sides, at base not evidently wider, the suture fully a third longer, than the prothorax; abdomen a little narrower than the elytra, subparallel, with slightly arcuate sides, very feebly narrowing apically, the fourth and fifth tergites equal. Length 1.5 mm.; width 0.4 mm. Pennsylvania (near Philadelphia).

Allied to the last but very different in the basal parts of the antennæ and the less rapidly incrassate apical parts, in its smaller eyes and in coloration; the sixth tergite of the female is very broadly and evenly rounded at apex.

Atheta vacillans n. sp.—Moderately stout, subparallel, shining, blackish-piceous, the head and abdomen black, the latter with the apex and apices of the basal tergites paler; elytra pale piceo-flavate throughout, the legs pale; punctures feeble, asperulate, not at all dense, very sparse on the abdomen, the vestiture rather long, palish; head large, rather transverse, four-fifths as wide as the prothorax, the tempora tumid, as prominent as the eyes and nearly two-thirds as long, the fine carinæ not quite entire; antennæ rather short, gradually incrassate and dusky distally, slender and pale basally, the second joint more cylindric but scarcely so long as the third, which is more than twice as long as wide, fourth barely at all shorter than wide, the tenth one-half wider than long, the last acutely ogival, equal in length to the two preceding; prothorax rather more than one-half wider than long, parallel, the sides feebly rounded, becoming straighter basally and a little more converging at apex, the median line slightly impressed throughout; elytra short, with diverging and nearly straight sides, at base very evidently wider, the suture a third longer, than the prothorax; abdomen narrower than the elytra, parallel, with nearly straight sides, the fifth tergite but little longer than the fourth. Length 2.5 mm.; width 0.68 mm. Rhode Island (Boston Neck).

This species seems to be allied most closely to *dama*, differing in the much larger head, more congested tempora and shorter prothorax; from *comitata*, which occurs in the same locality and also has a notably large head, it may be known at once by the congested tempora and more slender antennæ, as well as the relatively smaller prothorax. The mesosternal process is not aciculate but very narrowly rounded at tip and separated from the angulate metasternum by much less than a third of the width of the middle femora, the coxæ not very approximate.

The four following also have the general aspect of fungivorous species and are distinguishable at once by the coloration, the black or blackish abdomen having the first two tergites abruptly pale and testaceous; they should follow immediately after *nexa* in my previous arrangement, but they all have the prothorax larger than in that species:

Atheta propitia n. sp.—Rather stout, very shining, black or piceous-black throughout, the elytra basally, except at the scutellum, the two basal tergites and the abdominal apex pale testaceous, the legs very pale; punctures fine, not dense, sparse on the abdomen, the pubescence moderate; head nearly three-fourths as wide as the prothorax, slightly transverse, the eyes rather prominent, at less than their own length from the base, the tempora almost equally prominent, straight and parallel, then broadly rounding to the base, the carinæ very fine but entire; antennæ blackish, rather thick, moderately short, pale basally, the third joint slightly longer than the second, twice as long as wide, not quite as long as the fourth and fifth, which are distinctly transverse, the outer joints rather strongly so, the last gradually and very acutely pointed, longer than the two preceding; prothorax nearly one-half wider than long, parallel and feebly arcuate at the sides, more rounding at apex and with a small rounded ante-scutellar impression; elytra rather transverse, with nearly straight and feebly diverging sides, at base very slightly wider, the suture barely a fourth longer, than the prothorax; abdomen slightly narrower than the elytra, parallel at base but gradually very slightly narrowing thence posteriorly, the fifth tergite much longer than the fourth, the sixth (♀) evenly and circularly rounded at apex. Length 2.6 mm.; width 0.7 mm. North Carolina (Asheville).

A distinct species in coloration and many other characters and not closely allied to any other described thus far.

Atheta palpator n. sp.—Rather stout, moderately convex and shining, the punctures fine, moderately close, sparser on the abdomen, the vestiture noticeably long and somewhat coarse, palish; color piceous-black, the head and the abdomen, except the apex and the first two tergites, deep black; elytra pale tawny-flavate, the external apical angles broadly and the suture narrowly and feebly toward base blackish, the legs very pale; head not quite three-fourths as wide as the prothorax, slightly wider than long, the eyes large, rather prominent, at three-fourths their length from the base, the tempora not quite so prominent, straight and parallel for a short distance, then strongly oblique to the base, the carinæ very fine, entire; antennæ black, gradually testaceous basally, moderately long, gradually and distinctly incrassate, the second and third joints subequal, fourth almost as long as wide, the outer joints moderately transverse, the last slender, narrowing apically but obtusely pointed and evidently longer than the two preceding; prothorax scarcely one-half wider than long, parallel and somewhat strongly rounded at the

sides, the base rounded, with very obtuse blunt angles, the small rounded ante-scutellar impression very feeble; elytra only moderately short, with feebly diverging and nearly straight sides, at base barely visibly wider, the suture scarcely a fourth longer, than the prothorax; abdomen evidently narrower than the elytra, parallel basally, gradually, very feebly and arcuately narrowing behind about the middle, the margins somewhat strong and deep, the fourth and fifth tergites equal in length, the sixth (♀) arcuato-truncate at apex; basal joint of the hind tarsi very slightly shorter than two to four, which are mutually equal, slender; apex of the meso-sternal process bearing two diverging yellow setæ and distant from the angulate metasternum by fully one-half the width of the middle femur, the coxæ not very approximate. Length 2.4 mm.; width 0.68 mm. Ohio (Cincinnati),—Dury.

Readily identifiable by the coloration and distinguishable from the preceding by the differently colored elytra and smaller, much less transverse fourth antennal joint.

Atheta burra n. sp.—Rather stout, subparallel and convex, very shining, the micro-reticulation feeble, in very fine feeble and close transverse wavy strigilation on the abdomen; punctures fine, somewhat close but not conspicuous, rather sparse on the abdomen, the vestiture somewhat coarse and pale; color dark rufo-piceous, the head and the abdomen behind the second tergite, except at apex, black; elytra pale tawny-yellow, clouded with blackish toward the external apical angles and suturally toward base, the legs very pale; head slightly wider than long, fully three-fourth as wide as the prothorax, the eyes large, at fully one-half their length from the base, the tempora equally prominent, straight and parallel for a short distance, then very oblique to the base, the carinæ very fine, far from entire; antennæ moderately long, rapidly incrassate and blackish distally, slender and pale through the unusually long basal part, the long second and third joints equal, fourth but slightly wider than long, tenth strongly transverse, the last gradually and acutely pointed, rather longer than the two preceding; prothorax fully one-half wider than long, parallel and somewhat strongly, subevenly rounded at the sides, with a small but distinct rounded ante-scutellar impression; elytra only slightly transverse, with diverging and nearly straight sides, at base only very slightly wider, the suture fully a third longer, than the prothorax; abdomen but little narrower than the elytra, parallel, with feebly and evenly arcuate sides, the fourth and fifth tergites equal, the sixth (♀) arcuato-truncate and broad at apex; tarsi as in the preceding. Length 2.2 mm.; width 0.68 mm. Wisconsin (Bayfield),—Wickham.

Resembles the preceding very much in form, size and coloration but differs in the larger though less prominent eyes, in the more apically and rapidly incrassate antennæ, rather shorter and more transverse prothorax and longer elytra; also in the finer, closer and more distinct transverse wavy strigilation of the abdomen,

this being coarser, more irregular and more nearly obsolete in *palpator*.

Atheta nacta n. sp.—Coloration, shining lustre and sculpture nearly as in *burra* but with the faint abdominal micro-reticulation less close, or less regularly transversely wavy; head more distinctly wider than long, scarcely more than two-thirds as wide as the prothorax, the eyes not so large but more prominent, at three-fourths their length from the base, the tempora decidedly less prominent, at first straight and parallel for a short distance, then oblique to the base, the carinæ fine but entire; antennæ moderately long, very gradually incrassate and black, slender and pale basally, the long second and third joints equal, fourth slightly longer than wide, fifth a little wider than long, tenth about one-half wider than long, the last gradually pointed, a little longer than the two preceding; prothorax as in the preceding, except that the ante-scutellar impression is somewhat larger, transversely oval and more shallow; elytra nearly as in the preceding, except that the suture is shorter and very much more deeply impressed at base, the base just visibly wider, the suture not over a fifth or sixth longer, than the prothorax; abdomen slightly narrower than the elytra, parallel basally, arcuately narrowing perceptibly toward tip, strongly margined, the fifth tergite not quite so long as the fourth, the sixth (♀) evenly and broadly rounded in circular arc. Length 2.0 mm.; width 0.7 mm. Missouri (St. Louis).

Related much more closely to *palpator* than to *burra* and similarly differing from *burra* in the more gradually and less apically incrassate antennæ; it resembles *palpator* in the form of the head, eyes, tempora and antennæ, though having the fourth joint of the latter longer and more parallel, but the prothorax is shorter and the elytra shorter, more diverging at the sides and with the suture very much more impressed basally.

The following six species may follow *ducens* in my previous statement of our probably fungivorous eastern species of larger size:

Atheta tradita n. sp.—Rather stout and convex, dullish in lustre, the abdomen shining but with the micro-reticulation not closely or regularly strigiliform; punctures fine, strongly asperulate and close-set, sparse on the abdomen; pubescence very short, palish and dense; color pale piceous-brown, the head darker but not black, the abdomen pale flavate, with a very feeble suffused darkish cloud posteriorly, except at apex, the elytra very pale albido-flavate, just visibly infumate toward the outer apical angles and the scutellum, the legs very pale; head well developed, transverse, two-thirds as wide as the prothorax, the eyes large, at about half their length from the base, the tempora equally prominent, parallel and straight for a very short distance, then moderately oblique to the base, the carinæ very fine, subentire; antennæ blackish, pale basally, rather long, very gradually and moderately incrassate, the long third joint distinctly longer than the second, fourth longer than the fifth, as

long as wide, the tenth but slightly transverse, eleventh gradually acute, fully as long as the two preceding; prothorax rather less than one-half wider than long, parallel, with evenly and distinctly rounded sides, the ante-scutellar impression very small, rounded and feeble; elytra ample, slightly transverse, not quite parallel, at base very slightly wider, the suture barely at all impressed at base and two-fifths longer, than the prothorax; abdomen slightly narrower than the elytra, parallel, with nearly straight sides, the fourth and fifth tergites about equal. Length 2.7 mm.; width 0.78 mm. New York (Catskill Mts.).

Allied to *ducens* and having similar male sexual characters, except that the ear-like processes at the sides of the sixth tergite are rather broader, more obtuse and more evenly concave; but the general coloration is paler, the elytra more albid, the body throughout much stouter and the head much larger—even relatively.

Atheta reformata n. sp.—Rather stout, moderately convex, subalutaceous, the abdomen polished and with minute, close and very feeble transversely wavy strigilation; punctures small, asperulate, moderately close, minute and sparse on the abdomen; pubescence rather long and coarse, pale; color piceous-black, the two basal tergites just visibly pallescent at their apices, the elytra pale tawny-flavate, largely infumate at the scutellum but not at all so postero-externally, the legs very pale; head nearly as long as wide, fully three-fourths as wide as the prothorax, the eyes large but only moderately convex, the tempora not quite so prominent, two-thirds as long, parallel near the eyes, oblique basally, the carinæ fine and entire; antennæ dark, the basal joint alone pale, second and third long and equal, each a little shorter than the first, fourth about as long as wide, the remainder missing in the type; prothorax relatively moderate in size, two-fifths wider than long, parallel, with evenly and moderately rounded sides and rounded base, the median line feebly impressed basally, joining a feeble transverse ante-scutellar impression; elytra nearly parallel, only slightly transverse, almost a third wider and one-half longer than the prothorax; abdomen rather broad, slightly narrower than the elytra, parallel, with almost straight sides, the fourth and fifth tergites equal, the sixth in the type rapidly narrowed to the apex, which is feebly and subangularly sinuate. Length 2.6 mm.; width 0.73 mm. Wisconsin (Bayfield),—Wickham.

Distinguishable very easily from the preceding by its much less transverse head and relatively smaller prothorax, heavier though shallower margins of the abdomen and the coloration. The metasternal angle is shorter and more obtuse at apex.

Atheta fenisex n. sp.—Form, coloration and sculpture nearly as in the preceding, except that the elytra are almost uniformly pale tawny-flavate throughout, not darker in the scutellar region, the abdomen a little paler at the extreme tip, with the micro-reticulation of the latter not quite so close and less regularly in transverse strigilation, very feeble, the pu-

bescence shorter and finer; head much smaller, three-fifths as wide as the prothorax, distinctly transverse, the eyes large and prominent, at three-fourths their length from the base, the tempora much less prominent and strongly arcuate to the base, the carinæ fine and entire; antennæ only moderately long, black, pale basally, only moderately and gradually incrassate, the third joint a little longer than the second and as long as the first, fourth a little longer than wide, fifth to tenth but little wider than long, the last gradually narrowed to the subacute apex and fully as long as the two preceding; prothorax large and notably convex, not quite two-fifths wider than long, the sides very moderately rounded, parallel, sensibly more converging before the middle, the median line very broadly and obsoletely impressed in more than basal half, with a small rounded impression at base; elytra but slightly transverse, with evidently diverging and nearly straight sides, at base not obviously wider than the prothorax, the suture two-fifths longer; abdomen much narrower than the elytra, parallel, with feebly and evenly arcuate sides and rather thin deep margins, the fifth tergite a little longer than the fourth, the sixth (♀) broadly, feebly sinuato-truncate medially, the sixth ventral broadly arcuato-truncate. Length 2.7 mm.; width 0.7 mm. Rhode Island (Boston Neck).

Differs greatly from either of the two preceding in its much smaller head, larger or less transverse prothorax and other features. The metasternal projection is narrower than in *reformata* and as advanced as in *tradita*, the point rather acute.

Atheta vierecki n. sp.—Rather stout, subparallel, moderately convex and shining, black or piceous-black, the abdomen feebly pallescent at apex, the pale tawny elytra feebly infumate suturo-basally and just visibly or obsoletely so postero-externally, the legs pale; punctures small, rather close and strongly asperate, finer, sparser and parted by a broad punctureless line on the head, minute but rather numerous on the abdomen, which is more shining and with the minute sculpture only moderately close, irregularly and very transversely polygonal and feeble; pubescence rather long and coarse, pallid; head relatively small, only three-fifths as wide as the prothorax, slightly wider than long, the eyes moderately convex, at three-fourths their length from the base, the tempora subevenly arcuate and converging behind them to the base, the carinæ fine, not entire; antennæ rather long, only very moderately incrassate, blackish, pale basally, the second and third joints equal, fourth distinctly, the fifth slightly, longer than wide, the outer joints only very moderately transverse, the last fully as long as the two preceding; prothorax large, fully one-half wider than long, parallel but only very feebly arcuate at the sides, which are rapidly rounded at apex, the base rounded with the angles obtuse but unusually distinct, the small ante-scutellar impression very feeble, rounded; elytra slightly transverse, subparallel, only just perceptibly wider than the prothorax and two-fifths longer; abdomen distinctly narrower than the elytra, gradually and very slightly narrowing posteriorly, the fifth tergite but little longer than the fourth, the sixth

(♂) truncate transversely at tip between the rather large, rounded and moderately inclined, feebly concave auriculæ at the lateral angles, these only very feebly prominent posteriorly; metasternal projection almost equilatero-triangular, the angle sharply defined. Length 2.4–2.7 mm.; width 0.58–0.63 mm. Connecticut (Double Beach),—H. L. Viereck. Found in fungus.

This distinct species belongs to the *ducens–auguralis* group and has similar male sexual characters; the head is relatively even smaller than in the former, the prothorax much larger, and it differs from the latter in its smaller head and very much in the form of the metasternal projection.

Atheta auguralis n. sp.—Moderately stout and convex, feebly shining, the abdomen polished, with numerous fine punctures, sparse behind the third tergite and with the micro-reticulation feeble and subtransverse but not strigilate; punctures elsewhere small, strongly asperulate and close-set, the lustre feebly shining; pubescence very short, palish; color black, the elytra pale tawny-flavate, scarcely visibly and faintly suffused with darker postero-externally and at the scutellum, the first three tergites paler at their apical margins, the legs pale; head moderately small, slightly transverse, two-thirds as wide as the prothorax, the eyes well developed, at two-thirds their length from the base, the tempora not quite so prominent, straight and parallel, rounding basally, the carinæ very fine, subentire; antennæ moderately long, blackish, pale basally, gradually and moderately incrassate, the second and third joints equal, each shorter and much less stout than the first, fourth very little longer than wide, fifth to tenth distinctly wider than long, the last as long as the two preceding; prothorax well developed, fully one-half wider than long, parallel, with very moderately rounded sides, a little more rounding and converging apically, the base rounded, with the usual obtuse angles, the surface with a shallow and transversely oval ante-scutellar impression; elytra nearly parallel, moderately transverse, very slightly wider, the suture a third longer, than the prothorax; abdomen distinctly narrower than the elytra, parallel, narrowing very slightly apically, the margins rather thin, the fifth tergite slightly longer than the fourth, the sixth (♂) with a large horizontal, feebly concave, evenly rounded auricle at each side of the apex, the space between them gently sinuato-truncate and even. Length 3.0 mm.; width 0.7 mm. New York (Catskill Mts.).

Recalls *ducens* in its rather small head; but neither the head nor prothorax are relatively so small as in that species, and it differs furthermore from *ducens* and the other preceding related forms in the unusually short, broad, obtusely parabolic metasternal projection.

Atheta bifaria n. sp.—Coloration, sculpture and lustre nearly as in the preceding, the punctures less close-set, the black abdomen faintly paler

basally and with the reticulation a little larger than in *auguralis*, transverse and irregular but not strigilate; head moderate, three-fourths as wide as the prothorax, distinctly transverse, otherwise as in the preceding throughout, the antennæ nearly similar, relatively a little longer, the second and third joints each much shorter than the first, the third very little longer than the second, fourth slightly longer than wide, the fifth about as long as wide, the outer joints evidently wider than long, the last rather longer than the two preceding; prothorax moderate, two-fifths wider than long, parallel and evenly, moderately rounded at the sides, with a small transversely oval ante-scutellar impression; elytra moderately transverse, with diverging and nearly straight sides, at base slightly, at apex very much, wider, the suture slightly more than a fourth longer, than the prothorax; abdomen nearly as wide as the elytra, parallel, arcuately narrowing very slightly behind. the fifth tergite a little longer than the fourth, the sixth (♀) very broadly rounded at apex. Length 2.2 mm.; width 0.67 mm. District of Columbia.

Allied to the last but smaller, the prothorax relatively smaller and the head larger; also differing radically in the form of the metasternal projection, which is here much longer, narrower and acutely angulate, as is generally the case in this section.

The remaining species here assigned to typical *Atheta*, inhabit the very broken country west of the Rocky Mountains and hold together rather homogenously, having the general facies of *prolata*, *innocens*, *reticula* and other similar forms. These western species, many of which are structurally aberrant, differ from the eastern, as a class, in their larger size, stouter build and darker colors, the small slight pallid eastern forms of the *gnoma* type being unrepresented there as far as known,—another evidence of the radical difference between the Atlantic and Pacific coast faunas in general. This evident incongruity of the two Athetid faunas results directly, in all probability, from the relative development of fungoid vegetation in the two regions, the latter being more abundant and diversified in the moister Atlantic region, and, in the northern Pacific coast regions, the excessive rainfall of which would seem to encourage extensive fungous growths, the fungus-eating Atlantic species of the preceding types are largely replaced by the Bolitocharid genus *Stictalia*.

The following ten species inhabit the coastal regions from San Francisco Bay to San Diego:

Atheta novicia n. sp.—Not very stout, rather convex, strongly shining, finely, not densely or very asperately punctate, finely and very sparsely

on the abdomen, which is almost impunctate apically and having the micro-reticulation rather large and polygonal; pubescence noticeably long and rather coarse, palish; color piceous, the head and abdomen, except at apex, black, the elytra paler, piceo-testaceous, the legs pale; head scarcely wider than long, rather more than three-fourths as wide as the prothorax, parallel, with feebly and evenly arcuate sides, the eyes but slightly prominent and at evidently more than their own length from the base, the carinæ wholly wanting; antennæ rather long, black, piceous basally, stout, gradually strongly incrassate, the third joint longer than the second and almost as long as the first, fourth longer than wide, fifth and sixth about as long as wide, seven to nine shorter and distinctly transverse, the tenth large but less transverse, the last fully as long as the two preceding; prothorax rather small, parallel, with evenly and moderately rounded sides and a feeble transverse ante-scutellar impression, the base rounded, two-fifths wider than long; elytra slightly transverse, with nearly straight and feebly diverging sides, fully two-fifths wider and longer than the prothorax, the apices not at all sinuate; abdomen a little narrower than the elytra, parallel, with feebly and evenly arcuate sides, the fifth tergite slightly longer than the fourth, the sixth (♂) rectilinearly truncate at apex, the edge very feebly, unevenly undulated, with a feeble externally arcuate longitudinal carinule at each side, within which the surface is feebly concave. Length 2.4 mm.; width 0.68 mm. California (San Mateo),—Baker.

This is not truly an *Atheta*, but I leave it here because of its general facies. The middle coxæ are moderately separated, the mesosternal process very acute but separated from the transversely and feebly arcuate metasternum by a long depressed and obtusely ridged interval. The punctures of the head are rather coarse and parted by a broad impunctate median line.

Atheta fugitans n. sp.—Rather slight and smaller, shining, black, the pronotum feebly picescent, the elytra somewhat pale flavo-piceous, the legs pale; punctures small but asperate, moderately close, sparse on the abdomen, where the rather coarse reticulation is transversely lineate in wavy lines; pubescence rather long and coarse, palish; head transverse, four-fifths as wide as the prothorax, the eyes large, at two-thirds their length from the base, the tempora less prominent, at first straight and parallel, then rapidly transversely rounded to the base, the carinæ fine, not quite entire; antennæ blackish, the basal joint paler, rather short, gradually moderately incrassate, the second and third joints equal, fourth distinctly, the outer joints mutually similar and strongly, transverse, the last longer than the two preceding; prothorax moderate, fully one-half wider than long, subparallel, scarcely rounded at the sides, the latter rounding and more converging anteriorly, having a rather large, shallow, transversely oval ante-scutellar impression; elytra moderately transverse, with very feebly diverging sides, a fourth wider and two-fifths longer than the prothorax; abdomen parallel, only slightly

narrower than the elytra, the fifth tergite scarcely so long as the fourth, the sixth in the type rather narrowly sinuato-truncate at tip, with obtuse angles. Length 2.3 mm.; width 0.6 mm. California (San Mateo),—Baker.

The sex of the type is not determinate. The middle coxæ are moderately separated, the metasternum advancing moderately between them, forming a subacute angle.

Atheta morbosa n. sp.—Moderately slight, not notably convex, piceous-black throughout, the elytra barely at all paler, the legs pale; surface but feebly shining, the anterior parts very uniformly, closely and asperulately punctate, the abdomen sparsely, more shining and with the reticulation rather strong, moderately small and in transverse wavy lines; head moderately transverse, the eyes large, at much less than their own length from the base, the tempora almost equally prominent, strongly arcuate, converging basally, the carinæ fine, not quite entire; antennæ rather long, gradually moderately incrassate, blackish throughout, the second and third joints equal, fourth distinctly longer than wide, the outer joints about one-half wider than long, the last ogivally pointed, rather longer than the two preceding; prothorax nearly one-half wider than long, parallel, the sides moderately arcuate, rather more so before than behind the middle, unimpressed; elytra moderately transverse, a fourth wider and two-fifths longer than the prothorax; abdomen parallel, much narrower than the elytra, the fourth and fifth tergites equal, the sixth tergite and ventral (♀) broad and very broadly, feebly arcuate at apex. Length 2.3 mm.; width 0.66 mm. California (Saucelito near San Francisco).

The metasternum is rather broadly, though distinctly, angulate and the coxæ moderately separated. This species may be known by its even, close-set, asperate punctures and sombre coloration; it seems to be a true *Atheta* like the preceding.

Atheta audens n. sp.—Moderately stout, rather small, moderately convex and shining, the abdomen with fine sparse punctures, strongly shining and with the minute sculpture almost obsolete, traceable in transverse irregular wavy lines; punctures of the anterior parts fine, rather close-set, feebly asperulate on the elytra; pubescence moderate, palish; color black, the pronotum feebly picescent, the abdominal tip and apical margins of the two or three basal tergites paler, the elytra tawny, just visibly infumate about the scutellum and postero-externally, the legs pale; head wider than long, fully two-thirds as wide as the prothorax, the eyes prominent, at rather less than their own length from the base, the tempora less prominent, broadly rounding and converging to the base, the carinæ fine, subentire; antennæ moderately long and incrassate, black, slightly pale basally, the second and third joints equal, not very elongate, each two-thirds as long as the first, fourth longer than wide, fifth about as long as wide, the outer joints evidently transverse,

the last pointed, as long as the two preceding; prothorax one-half wider than long, parallel, distinctly and subevenly rounded at the sides, with a feeble transverse ante-scutellar impression; elytra only just visibly wider but two-fifths longer than the prothorax; abdomen distinctly narrower than the elytra, parallel basally, evidently and arcuately narrowing posteriorly from about the middle, the fourth and fifth tergites subequal in length, the sixth (♂) truncate, the truncature feebly sinuate in about median third, more transverse laterally to the fine, longitudinal, reflexed and posteriorly somewhat prominent carinule at each side. Length 2.3 mm.; width 0.66 mm. California (Oakland).

This is evidently a typical *Atheta;* the mesosternal process is very thin and gradually finely aciculate and the metasternal projection angulate.

Atheta lepidula n. sp.—Form more fusoid, the coloration, sculpture and pubescence nearly similar, except that the minute abdominal sculpture is more distinct in loose wavy transverse lines; head rather more transverse, four-fifths as wide as the prothorax, the eyes nearly similar, the carinæ not quite entire; antennæ a little longer and somewhat less incrassate, similar in coloration, the third joint very little longer than the second, fourth only just visibly elongate, the outer joints slightly less transverse than in *audens*, the last more elongate, more gradually pointed, fully as long as the two preceding; prothorax relatively much smaller though otherwise similar, except that the basal impression is obsolete; elytra much broader and relatively shorter, fully a third wider than the prothorax and nearly one-half longer; abdomen much narrower than the elytra, parallel, with evenly arcuate sides, widest at the middle, the fifth tergite slightly longer than the fourth, the sixth in the type evenly sinuato-truncate from side to side, the lateral angles simple, obtuse but sharply defined, not at all modified. Length 2.6 mm.; width 0.72 mm. California (vicinity of Oakland and Berkeley).

Closely allied to the preceding but differing obviously in many ways, the much smaller prothorax and broader elytra giving it a different habitus and, besides this, the rather less incrassate antennæ, with longer terminal joint and the narrower abdomen, parallel and arcuate at the sides and not definitely more narrowed apically, seem to be distinctive characters that cannot be overlooked. The sex of the type is not definitely known; if it is the female of *audens*, the antennæ and abdominal characters are certainly exceptional. This and the three preceding species are allied to *neutralis* and *aperta* Csy., but differ from the former, in their much larger head and, from the latter, in antennal structure, shorter prothorax and other characters.

Atheta socors n. sp.—Moderately stout and convex, dull in lustre, the

abdomen shining but with the minute punctures rather close, and with the minute sculpture not very close and in irregular transverse wavy lines; punctures dense and asperulate, the pubescence moderate, palish; color dark piceous, the head and abdomen in great part blacker, the elytra tawny-yellowish, infuscate about the scutellum and postero-externally, the legs pale; head slightly transverse, two-thirds as wide as the prothorax, parallel, the eyes large, at a little less than their own length from the base, the tempora equally prominent, straight and parallel for a long distance, then gradually rounding to the base, the carinæ fine, subentire; antennæ blackish, somewhat paler basally, moderately long, gradually and not strongly incrassate, the third joint slightly longer than the second, fourth a little longer than wide, the fifth as long as wide, the outer joints becoming distinctly transverse, the last conoidal, not quite so long as the two preceding; prothorax well developed, two-fifths wider than long, parallel and evenly, moderately rounded at the sides, the median line feebly impressed basally; elytra but slightly transverse, with feebly diverging sides, at base very slightly wider, the suture a third longer, than the prothorax; abdomen slightly narrower than the elytra, parallel, with nearly straight sides, the fifth tergite slightly longer than the fourth, the sixth (♀) very broadly rounded at apex, becoming slightly sinuate medially; mesosternal process long but with the tip not very fine, moderately separated from the somewhat small but angulate metasternal projection. Length 2.7 mm.; width 0.7 mm. California (San Diego).

Distinguishable by the nearly parallel outline, form of the head and dullish lustre.

Atheta repexa n. sp.—Moderately stout, somewhat shining, finely, closely, asperately punctate, the abdomen polished, minutely, sparsely punctate, with the micro-reticulation transversely polygonal; pubescence rather long and coarse, pale; color piceous-black, the head and entire abdomen deep black, the elytra pale tawny-yellow, blackish at the scutellum but not evidently so postero-externally, the legs pale; head moderate, rather transverse, almost four-fifths as wide as the prothorax, the eyes prominent, at three-fourths their length from the base, the tempora less prominent, straight and parallel for a short distance, then strongly rounding to the base, the carinæ fine, not quite entire; antennæ black, pallescent basally, moderate in length, gradually rather strongly incrassate distally, the second and third joints equal, fourth much longer than wide, fifth as long as wide, the outer joints fully one-half wider than long, the last conoidal, somewhat longer than the two preceding; prothorax rather small, two-fifths wider than long, parallel and moderately rounded at the sides, which are more rounding and convergent apically, the impression obsolescent; elytra parallel, only slightly transverse, fully a third wider and one-half longer than the prothorax; abdomen much narrower than the elytra, parallel, narrowing very slightly behind, the fourth and fifth tergites equal in length; metasternal projection broad, evenly triangular, about twice as wide as long, separated from the acute

mesosternal tip by a moderately short and very deep interval which is acutely ridged at the bottom. Length 2.65 mm.; width 0.62 mm. California (Mountains near Claremont),—Baker.

To be distinguished readily from the last, though somewhat similar in the rapidly more transverse distal antennal joints, by its much less developed prothorax.

Atheta stoica n. sp.—Large and stout, moderately convex, feebly shining, minutely and not very closely punctate, asperulately and more closely on the elytra, minutely and sparsely on the polished abdomen, which is extremely finely and densely though almost obsoletely strigilate transversely; pubescence fine, very short, palish; color black, the elytra dark yellowish-testaceous, just visibly infumate toward the scutellum, the legs pale; head relatively rather small, wider than long, two-thirds as wide as the prothorax, the eyes large, at two-thirds their length from the base, the tempora very nearly as prominent, parallel and straight for some distance, then rounding to the base, the carinæ rather strong, entire, the front with the median line rather broadly punctureless, finely, feebly impressed on the occiput; antennæ long and very slender, only slightly and very gradually incrassate, blackish, the basal joint a little paler, the third longer than the second and as long as the first, fourth much longer, the outer joints rather longer, than wide, the last acutely ogival, much shorter than the two preceding; prothorax large, fully one-half wider than long, parallel, with moderately rounding sides, becoming much more rounded and converging apically, the median line finely and feebly impressed throughout; elytra large, moderately transverse, with just visibly diverging sides, at base slightly though evidently wider, the suture two-fifths longer, than the prothorax; abdomen distinctly narrower than the elytra, parallel, gradually and very slightly narrowing behind, the fourth and fifth tergites equal in length. Length 3.0 mm.; width 0.89 mm. California (San Francisco).

The long and very slender antennæ, with all the joints longer than wide, are very aberrant for true *Atheta*, but I do not now see how it can be placed elsewhere; the general facies is purely Athetid.

Atheta intacta n. sp.—Rather stout, narrowing anteriorly, moderately convex and shining, the abdomen strongly shining, with numerous fine punctures basally, becoming sparse posteriorly and with distinct, though extremely close, minute transverse strigilation; punctures throughout anteriorly close-set, small but strongly asperate, not minute on the head and parted along the middle as in the preceding; pubescence very fine and short, palish; color throughout nearly as in the preceding; head moderately transverse, fully three-fourths as wide as the prothorax, the eyes rather prominent, at fully two-thirds their length from the base, the tempora less prominent, straight and parallel near the eyes but thence strongly rounding to the base, the carinæ very fine, far from entire; antennæ moderately long and incrassate, very gradually so and blackish distally, picescent basally, the third joint as long as the first, very slightly

longer than the second, fourth very little longer than wide, the fifth nearly as long as wide, the outer joints only slightly wider than long, the last ogival and shorter than the two preceding; prothorax rather small, scarcely two-fifths wider than long, parallel and subevenly, moderately rounded at the sides, the median line very finely and obsoletely impressed, basally; elytra but slightly transverse, with feebly diverging sides, at base fully a third wider, the suture broadly impressed at base and almost one-half longer, than the prothorax; abdomen much narrower than the elytra, parallel basally, arcuately and rather strongly narrowing posteriorly, the fifth tergite a little longer than the fourth. Length 2.7 mm.; width 0.75 mm. California (Saucelito, Marin Co.).

This species is of the usual Athetid type, but may be recognized by the characters given above as accurately as possible from the female; another example, from San Francisco Co., and very immature, represents a closely allied form with shorter outer antennal joints, relatively smaller head which is almost as long as wide and with rather smaller, less prominent eyes, the prothorax having the parallel sides only very slightly arcuate; it apparently represents a distinct species, the number of which seem to be unending.

Atheta importuna n. sp.—Moderately stout and only slightly convex, somewhat shining, blackish-piceous, the head and abdomen black, the latter pale at apex, the elytra very dark testaceous, becoming broadly black basally and at the sides nearly to the tip, the legs very pale; punctures fine, close, stronger and asperate on the elytra, rather close on the abdomen except apically, the abdominal reticulation rather large, strong and polygonal; pubescence moderately long and coarse; head large, slightly wider than long, five-sixths as wide as the prothorax, the eyes at evidently more than their own length from the base, the tempora long, parallel, equally prominent and straight, broadly rounding at base, the carinæ strong and entire; antennæ piceous-brown, paler and very slender basally, rapidly and very strongly incrassate, thick at the tip, the second and third joints long, subequal, the fourth distinctly elongate, fifth as long as wide, the joints thence rapidly larger, very strongly obtrapezoidal, tenth one-half wider than long, the last somewhat swollen, oval, pointed at tip and as long as the two preceding; prothorax small, a third wider than long, parallel, the sides slightly rounded, straighter basally, the basal angles obtuse but sharp, the surface not definitely impressed; elytra subparallel, but slightly transverse, almost two-fifths wider and one-half longer than the prothorax, the apices very feebly sinuate laterally; abdomen slightly narrower than the elytra, parallel, narrowing a little at apex, the fifth tergite very much shorter than the fourth; middle coxæ slightly separated, the metasternal projection small but elongate and acutely angulate. Length 2.7 mm.; width 0.69 mm. California (San Francisco).

This species is somewhat aberrant in its small prothorax and

form of the head; the evenly thickened antennæ to the apex is a distinctive character.

The following five species belong to the true northern coastal fauna, to the westward of the Cascade range—or the prolongation of the Sierras of California. The *brumalis* group should properly form a part of them, but this group, consisting of *brumalis*, *carlottæ*, *wrangelica* and *sumpta*, has been alluded to above under *wrangelica*.

Atheta relicta n. sp.—Stout, subparallel, moderately convex, rather shining, the punctures moderately close, asperate, denser on the elytra, sparse on the head and broadly parted along the middle, fine and numerous on the basal tergites, except in the smooth basal impressions, sparser and asperate posteriorly, the abdominal micro-reticulation rather large, transversely polygonal; vestiture rather long and coarse, palish; color deep black, the elytra dark brownish-testaceous, black about the scutellum and postero-externally, the legs pale; head large, transverse, fully three-fourths as wide as the prothorax, the eyes prominent, at two-thirds their length from the base, the tempora much less prominent, straight and parallel, then abruptly rounding at base, the carinæ fine and far from entire; antennæ black, piceous basally, rather long and notably heavy, the third joint longer than the second, fourth as long as wide, fifth nearly so, the outer joints only slightly transverse, the tenth longer than the ninth, the last large, conoidal with the tip obtuse, fully as long as the two preceding; prothorax large, fully one-half wider than long, parallel, distinctly and evenly rounded at the sides, the median line (♂) feebly but rather broadly and distinctly impressed from somewhat before the middle to the base; elytra large, moderately transverse, with diverging sides, at base only very slightly wider, the suture impressed basally and fully two-fifths longer, than the prothorax; abdomen only slightly narrower than the elytra, parallel, with well developed margins, the fourth and fifth tergites equal, the sixth (♂) rectilinearly truncate and but slightly irregular at tip, the lateral processes short, tumid and only slightly projecting posteriorly; middle coxæ distinctly separated, the mesosternal process gradually prolonged but rather thick, not finely aciculate, acute at tip, the concave interval between it and the short and broad though evenly angulate metasternum nearly half the femoral thickness. Length 2.7–2.9 mm.; width 0.76–0.83 mm. British Columbia (Metlakatla),—Keen.

In the female the impression in more than basal half of the pronotal median line is feebler than in the male, or subobsolete, but it is of the same nature. This species or the next may prove to be the *metlakatlana*, of Bernhauer, who compares it with *vasta* Mäkl. The elytra here are very much longer than in *vasta*, judging by Mannerheim's description, but the basal impression of the pronotum seems to recall it. If Dr. Bernhauer can find opportunity

to read these descriptions, he may be able to publish the proper synonymy, for his diagnosis of *metlakatlana* is too incomplete and ambiguous to afford satisfactory means of identification.

Atheta districta n. sp.—Stout, subparallel, rather convex and shining, finely, not densely, asperulately punctate, closely but still notably finely on the elytra, the polished abdomen with numerous fine punctures and having the minute sculpture excessively finely, closely, transversely strigilate; pubescence rather short, not very conspicuous; coloration as in the preceding; head moderate, transverse, two-thirds as wide as the prothorax, the eyes large, at less than their own length from the base, the tempora subequally prominent, parallel and nearly straight, then gradually rounding to the base, the carinæ very fine though subentire; antennæ rather slender, black, the basal joint paler, piceous, rather long, gradually and only very slightly incrassate distally, the third joint rather longer than the first and much longer than the second, fourth unusually elongate, fully one-half longer than wide, fifth to seventh a little longer than wide, the ninth and tenth mutually similar and only very little wider than long, the last slender, ogival, as long as the two preceding; prothorax in outline nearly as in the preceding but not quite so transverse and with merely a very feeble transversely linear ante-scutellar impression; elytra nearly as in the preceding but rather broader, at base slightly wider, the suture but feebly impressed basally and fully a third longer, than the prothorax; abdomen only slightly narrower than the elytra, parallel, narrowing distinctly near the apex, the tergites equal in length; mesosternal process acutely triangular, much more rapidly widening anteriorly from the point than in any allied species, less free than in the preceding but separated by about the same distance from the short, broadly and obtusely subangulate metasternum. Length 2.8 mm.; width 0.8 mm. British Columbia (Metlakatla),—Keen.

Differing radically from the preceding in its much more slender and peculiar antennæ and in the intermesocoxal structure, in the sculpture of the abdomen and in many other ways; the type is a female.

Atheta alaskana n. sp.—Less parallel and rather smaller though similar to the preceding in coloration, lustre and sculpture but with the punctures stronger, more asperate and denser, especially on the pronotum, the minute close abdominal strigilation almost similar, the pubescence rather longer and coarser, pale as usual; head nearly as in *districta* throughout, the eyes a little less prominent; antennæ long, blackish, slender basally, gradually and very moderately incrassate distally, the third joint about as long as the first, longer than the second, fourth a third longer than wide, less parallel than in the preceding species, fifth not evidently longer than wide, the outer joints mutually similar and very slightly transverse, the last acutely pointed, as long as the two preceding; prothorax small, only a third wider than the head, nearly one-

half wider than long, parallel, moderately rounded at the sides, the median line very finely and feebly impressed almost throughout, gradually a little more strongly basally; elytra large, nearly parallel, slightly transverse, two-fifths wider and nearly one-half longer than the prothorax; abdomen as in the preceding; mesosternal process longer, more parallel apically than in the preceding, the tip acutely rounded and separated from the less abbreviated and more sharply triangular metasternum by a shorter interval, barely a third the thickness of the middle femora. Length 2.8 mm.; width 0.78 mm. Alaska (without further indication, but probably collected on the mainland near Fort Wrangel),—Wickham.

This species is evidently allied only to the preceding but differs in its much smaller prothorax, more basally slender antennæ, with the joints not quite so elongate throughout and in the longer, less triangular mesosternal process; in relation to the prothorax the head is very much larger than in *districta*.

Atheta rurigena n. sp.—General facies, coloration and sculpture as in *alaskana* but less stout and with the punctuation finer, less close and scarcely at all asperulate, indistinct, the minute sculpture of the abdomen also different, being less fine, close or evenly strigilate though in looser and more irregular wavy transverse lines, the vestiture not quite so long or coarse; head large, transverse, four-fifths as wide as the prothorax, the eyes large, at two-thirds their length from the base, the tempora about equally prominent, straight and parallel for a short distance, then abruptly oblique to the base, the carinæ wholly obsolete; antennæ long, almost filiform though rather thick, dark piceous in color, the third joint longer than the second, fourth a third longer than wide, all the succeeding joints, including the tenth, mutually subsimilar and very slightly longer than wide, the last slender but scarcely as long as the two preceding; prothorax rather well developed, in form nearly as in the preceding but only two-fifths wider than long, the median line not impressed but having a distinct transverse ante-scutellar impression; elytra shorter, rather strongly transverse, not quite parallel, at base slightly though very evidently wider, the suture scarcely a fifth longer, than the prothorax; abdomen almost similar; intermesocoxal parts almost as in *alaskana*, the drawn out apex of the mesosternum still less acute at tip and the metasternal projection sharply angulate and but little wider than long. Length 2.7 mm.; width 0.65 mm. British Columbia (Yale),—Wickham.

Differs from the preceding species in its more developed prothorax, which is also much less punctate and very differently impressed, in its longer and more filiform antennæ, which are thinner apically but thicker basally, in abdominal sculpture and other characters. The type is a female, having the moderately wide apex of the sixth tergite feebly and gradually sinuate medially, with broadly rounded lateral angles.

Atheta mordax n. sp.—More parallel, only slightly convex, black or nearly so, the abdominal tip paler, the elytra colored as in the preceding species, the legs pale; lustre moderately shining, the minute sculpture of the more polished abdomen coarsish and transversely polygonal posteriorly, becoming very fine, close and strigilate basally; punctures very fine and not asperate, indistinct, very close on the elytra, the vestiture rather long and coarse; head only slightly transverse, three-fourths as wide as the prothorax, the eyes rather small, slightly prominent, anterior, at a little more than their own length from the base, the tempora scarcely so prominent, parallel and nearly straight for a long distance, then moderately oblique to the base, the carinæ very fine but sharply elevated, not quite entire; antennæ long, rufo-piceous, gradually and rather strongly incrassate, the second joint barely shorter than the third, each much shorter than the first, fourth and fifth distinctly, the sixth not at all, longer than wide, the outer joints but just visibly wider than long, the last stout, ogival at tip, fully as long as the two preceding; prothorax only a fourth wider than long, parallel, evenly and rather strongly rounded at the sides, the median line very faintly impressed throughout; elytra slightly shorter than wide, the sides evidently diverging, straight, at base only very slightly wider, the suture a third longer, than the prothorax; abdomen parallel, slightly narrower than the elytra, the fifth tergite but little longer than the fourth, the sixth in the type very broadly arcuate at apex, the sixth ventral arcuato-truncate, with rounded though evident side angles; middle coxæ almost contiguous, the mesosternal process rather short, very finely aciculate and separated by a very long interval from the transverse, extremely broadly and feebly angulate metasternum. Length 3.2 mm.; width 0.72 mm. British Columbia (Stickine River),—Wickham.

This is one of those species which it is difficult to say should be placed in *Atheta* or *Metaxya*. On the whole it has more real affinity with the latter, but in general facies it might be said to be rather an *Atheta;* so I leave it for the present in this position.

The three following species inhabit the country between the Sierra–Cascade ranges and the Rocky Mts.

Atheta subretracta n. sp.—Subparallel, rather convex and shining, piceous-black, the elytra dark brownish-testaceous, the punctures minute, not close, larger, rather close and feebly asperate on the elytra, minute and numerous on the abdomen, where the micro-reticulation is in irregularly wavy transverse lines; pubescence very fine and short; head almost as long as wide, very gradually and feebly wider to the base, the eyes not prominent and at more than their own length from the base, the carinæ very fine but subentire; antennæ short, blackish, pale basally, gradually rather strongly incrassate, the second and third joints equal, fourth obtrapezoidal and slightly wider than long, fifth to tenth mutually subsimilar, short, nearly twice as wide as long the last conoidal, as long as the two preceding; prothorax nearly three-

fifths wider than long, parallel, with moderately rounded sides and a very feeble transverse ante-scutellar impression; elytra moderately transverse, with straight and feebly diverging sides, at base equal in width to the prothorax, the suture two-fifths longer, the apices feebly sinuate externally; abdomen distinctly narrower than the elytra, parallel, feebly narrowing at apex; middle coxæ almost contiguous, the metasternum very short and broadly angulate. Length 2.4 mm.; width 0.62 mm. Idaho (Cœur d'Alene),—Wickham.

To be known at once by the parallel form and broad prothorax, short, somewhat strongly incrassate antennæ and cephalic as well as intermesocoxal structure. This species is not a truly typical *Atheta*.

Atheta concussa n. sp.—General form, coloration and sculpture as in the preceding but stouter; head larger and distinctly wider than long, two-thirds as wide as the prothorax, only just visibly inflated basally, the eyes a little larger and at not evidently more than their own length from the base, the carinæ similar; antennæ similar but not quite so short, quite as strongly and gradually incrassate distally, the second and third joints equal and a little longer than in *subretracta*, the fourth fully as long as wide, fifth to tenth gradually a little larger but subsimilar and but little more than one-half wider than long, the last as in the preceding species; prothorax and elytra similar throughout in form but larger and broader; abdomen broader, almost as wide as the elytra, more rapidly and conspicuously narrowed at apex, the fifth tergite similarly but little longer than the fourth; intermesocoxal parts as in the preceding. Length 2.4 mm.; width 0.72 mm. Washington State (Spokane),—Wickham.

Belongs to precisely the same small group as the preceding and very closely allied thereto, but differs in the larger and more transverse head, less abbreviated antennæ, slightly less transverse prothorax and longer elytra, more rapidly apically narrowed abdomen and generally distinctly stouter form. Both the above descriptions are taken from the female; in *concussa* the prothorax is extremely nearly but not quite as wide as the elytral base.

Atheta esmeraldæ n. sp.—Moderately stout, rather convex, highly polished, the micro-reticulation everywhere almost obsolete, the rather close, transversely wavy lines of the abdomen very feeble though traceable; punctures very fine, rather sparse and indistinct, larger, asperulate and moderatey dense on the elytra, somewhat remote on the abdomen; color very deep black, the elytra dark piceo-testaceous, the legs pale; head rather large, evidently wider than long, the eyes moderately large and prominent, at their own length from the base, the tempora rather less prominent, strongly arcuate to the base, becoming parallel near the eyes, the carinæ fine, far from entire; antennæ short, black, the basal joints pale, the second and third equal, fourth scarcely wider, a little

wider than long, the remaining joints abruptly much wider, rather stout but increasing only very little, passing from one-half to four-fifths wider than long, the last rather short, ogival, as long as the two preceding; prothorax rather small, fully one-half wider than long, parallel, strongly and subevenly rounded at the sides, with an extremely obsolescent transverse ante-scutellar impression; elytra large, slightly transverse, with straight and feebly diverging sides, at base about a fifth wider, the suture two-fifths longer, than the prothorax, the apices not sinuate externally; abdomen much narrower than the elytra, parallel, with very feebly and evenly arcuate sides, not evidently narrowed apically, the tergites all short and equal; middle coxæ narrowly separated, the metasternal projection broadly but sharply angulate, a little less abbreviated than in the two preceding. Length 2.3 mm.; width 0.63 mm. Nevada (Esmeralda Co.),—Nunenmacher.

This distinct species has no very close allies described thus far; the antennæ are nearly as in the two preceding, but the smaller prothorax and the highly polished integuments, as well as the form of the head, show that it does not belong to exactly the same restricted group. No sexual characters are observable in the three specimens at hand.

The following is an aberrant form, small in size and with peculiar conformation of the metasternum:

Atheta loquax n. sp.—Rather stout and convex, shining, the head and abdomen deep black, the prothorax blackish-piceous, the elytra paler, dark testaceous, the legs pale; punctures anteriorly very fine and not close, distinctly asperate and rather close on the elytra, fine and well separated on the abdomen, where the reticulation is large though very irregular and subtransverse; pubescence moderately long, palish; head but little wider than long, three-fourths as wide as the prothorax, the eyes prominent, at a little less than their own length from the base, the tempora slightly less prominent, strongly rounding to the base, becoming gradually parallel at the eyes, the carinæ very fine and feeble, subentire; antennæ piceous, moderately short, notably thick but only very gradually incrassate distally, the third joint rather longer and more obconic than the second, the fourth not quite as long as wide, the outer joints about a third wider than long, the last large, ogival, longer than the two preceding; prothorax relatively small, two-fifths wider than long, parallel, with evenly and moderately rounded sides, unimpressed; elytra large, moderately transverse, with feebly diverging sides, at base a fourth wider, the suture nearly two-fifths longer, than the prothorax, the apices broadly and feebly sinuate laterally; abdomen much narrower than the elytra, parallel, narrowing very slightly at apex, the fourth and fifth tergites equal in length; middle coxæ well separated, the mesosternal process rather wide, gradually narrowing to the acute but somewhat ogival tip, which is distant from the metasternal process,—the latter long, rather narrow and with the apex rounded, by a rather short interval which is not quite

as long as the transverse distance separating the coxæ; basal joint of the hind tarsi not so long as the second. Length 2.0 mm.; width 0.63 mm. California (Gilroy Hot Springs, Sta. Clara Co.).

Distinguishable by the rather small size, stout form, relatively small head and prothorax and by the sternal characters.

Subgenus **Traumœcia** Rey.

The two following species apparently belong here, having a similar habitus and structure of the intermesocoxal parts:

Atheta (Traumœcia) militaris n. sp.—Slender, subparallel, shining, the head and abdomen deep black, the pronotum and elytra very dark, blackish-piceous, the latter scarcely at all the paler, the legs piceous with the tarsi paler; punctures very fine, not dense, scarcely asperate, sparse on the abdomen, where the micro-reticulation is notably large, distinct and polygonal; pubescence rather sparse and fine, somewhat long though inconspicuous; head large, wider than long, fully four-fifths as wide as the prothorax, the eyes large and prominent, at three-fourths their length from the base, the tempora equally prominent, parallel and feebly arcuate, the carinæ very fine and feeble, subentire; antennæ dark piceous, moderately long, gradually and evidently incrassate, the third joint slender, slightly shorter and thinner than the second, the fourth as long as wide, fifth evidently, the outer joints rather strongly, transverse, the tenth longer than the ninth, the last oval, very obtuse, as long as the two preceding; prothorax moderate, convex, two-fifths wider than long, the sides broadly arcuate, feebly converging and straighter posteriorly from near apical third, the basal angles rounded, the median line very feebly impressed throughout; elytra well developed, with straight and diverging sides, only slightly shorter than wide, truncate externally at apex, at base a fourth wider, the suture two-fifths longer, than the prothorax; abdomen much narrower than the elytra, with perfectly straight and parallel sides and rather thin margins, the fourth and fifth tergites equal; metasternal projection large, almost equilatero-triangular, the coxæ slightly separated; first four joints of the hind tarsi equal. Length 1.8 mm.; width 0.45 mm. Alaska (Fort Wrangel),—Wickham.

There are no apparent signs denoting sex in the type and the species differs from those previously described in its much darker coloration, among other characters.

Atheta (Traumœcia) tenuicula n. sp.—Subparallel, like the preceding in its shining surface, fine loose punctures and large abdominal reticulation, which is here a little more transversely polygonal; color deep black throughout, the elytra barely visibly paler, piceous-black, the legs piceous; head well developed, only very little wider than long, the eyes large and prominent, at three-fourths their length from the base, the tempora not quite so prominent, parallel, then broadly rounding to the base, the carinæ extremely fine, not quite entire; antennæ rather short, deep black

throughout, gradually moderately incrassate, the third joint distinctly shorter than the second and not twice as long as wide, the fourth not quite as long as wide, strongly obtrapezoidal, the outer joints mutually similar, about a third wider than long, the last acutely ogival, not quite as long as the two preceding; prothorax a little shorter, less convex and more parallel than in the preceding, with evenly and moderately rounded sides, unimpressed; elytra large, but little shorter than wide, more nearly parallel, a fourth wider, the suture nearly one-half longer, than the prothorax; abdomen notably slender, much narrower than the elytra, parallel, with straight sides, the fifth tergite longer than the fourth; middle coxæ evidently separated, the mesosternal process becoming parallel but with its tip narrowly truncate, the metasternal projection much shorter than in the preceding, more than twice as wide as long though sharply angular. Length 1.9 mm.; width 0.5 mm. Manitoba (Aweme), —Criddle.

The relationship in width of the elytra, prothorax and head, which gradually decrease, is almost exactly as in *militaris*, but it differs in its still more intensely black coloration and in cephalic, antennal and intermesocoxal structure.

Atheta (**Traumœcia**) **obsequens** n. sp.—Moderately slender and convex, shining, dark rufo-piceous, the head black, the elytra paler, dark brownish-testaceous, clouded at the scutellum, the abdomen black except at apex and broadly toward base, the legs pale; punctures fine, rather close, asperulate, strongly so and dense on the elytra, fine and sparse on the abdomen, where the micro-reticulation is transversely polygonal; pubescence short and inconspicuous; head large, very short and transverse, four-fifths as wide as the prothorax, the eyes convex, at fully two-thirds their length from the base, the tempora equally prominent, parallel and straight for a short distance, then strongly and abruptly oblique to the base, the carinæ fine, not quite entire; antennæ piceous, slender and paler basally, extending to basal third of the elytra, gradually and distinctly incrassate, the third joint rather longer than the second, very strongly obconic, the fourth distinctly wider than long, tenth one-half wider than long, the last more slender than the preceding, conical and as long as the ninth and tenth; prothorax two-fifths wider than long, parallel and evenly, moderately rounded at the sides, the median line feebly and equally impressed throughout the length; elytra moderately transverse, with feebly diverging sides, at base just visibly wider, the suture a fourth longer, than the prothorax; abdomen slender, very much narrower than the elytra, parallel, with nearly straight sides, the fifth tergite a third longer than the fourth; middle coxæ narrowly separated, the metasternum broadly angulate. Length 2.3 mm.; width 0.52 mm. New York (Catskill Mts.).

The exact position of this species is doubtful; it is rather too slender to be associated with *gnoma* and other true Athetids, but the antennæ are too incrassate distally to harmonize very well with the other species here assigned to *Traumœcia*.

Subgenus **Donesia** Csy.

The small obscure species constituting this group have some tendency in the direction of *Metaxya;* the following is a second species:

Atheta (**Donesia**) **restricta** n. sp.—Subparallel, but slightly convex, somewhat alutaceous, piceous-black, the head and abdomen deeper black, the legs blackish; punctures very fine and close, indistinct because of the fine strong micro-reticulation, which is equally strong on the three anterior parts but larger though less strong and regularly polygonal on the more shining abdomen, where the punctures are numerous; pubescence very short and indistinct; head rather transverse, three-fourths as wide as the prothorax, the eyes at slightly more than their own length from the base, the tempora swollen and slightly more prominent, rounded, more so at base, the carinæ wanting; antennæ piceous, rather long and slender, gradually and very slightly incrassate, the second joint much shorter and thinner than the first, the third shorter and more constricted basally than the second, fourth to tenth subsimilar in form though increasing very slowly in size and scarcely visibly shorter than wide throughout, the last small, slender, not as long as the two preceding; median line of the upper surface strongly impressed from the centre to the base; prothorax one-half wider than long, parallel, the sides feebly arcuate, more rounding and converging at apex, the median line finely and deeply impressed throughout the length; elytra moderately transverse, scarcely visibly wider though a third longer than the prothorax; abdomen subparallel, with straight sides, narrower than the elytra, the fifth tergite longer than the fourth, the sixth ventral rather prominent and almost circularly rounded in the type; middle coxæ subcontiguous, the mesosternal process not extending beyond their middle and with its extremely finely aciculate tip separated from the transverse and very broadly angulate metasternum by a very long deep interval; first three joints of the hind tarsi subequal, the fourth a little shorter. Length 2.0 mm.; width 0.42 mm. Virginia (Fort Monroe).

Differs from *temporalis* in its slightly longer, more filiform and less incrassate antennæ and relatively narrower and not at all rufescent elytra.

Subgenus **Nemota** Csy.

As form and proportion are only relative terms, it was after studying some very slender species that I stated the outline in this genus to be "rather stout." When compared with *Atheta* proper, however, the form of the body is notably slender. The subgenus is peculiar in having the metasternum transverse and never materially projecting anteriorly, being allied in this way to *Metaxya* and *Hydrosmecta*, but the middle coxæ are not contiguous and the antennæ and the general habitus of the body quite different.

Atheta (Nemota) meticulosa n. sp.—Slender, subparallel, rather convex, polished throughout, the punctures very fine, sparse, well separated and but little larger on the elytra, the abdominal reticulation rather coarse and polygonal but feeble, especially toward base; pubescence sparse and inconspicuous; color rufo-piceous, the head and abdomen black, the elytra but just visibly paler than the prothorax, the legs pale piceous-brown; head nearly as long as wide, three-fourths as wide as the prothorax, just visibly and gradually broader basally, the eyes at more than their own length from the base, the tempora abruptly oblique at the extreme base, the carinæ very fine, far from entire; antennæ piceous, paler basally, notably short but slender, gradually and only slightly incrassate, the third joint very little shorter than the second but more narrowed at base, fourth fully, the fifth nearly, as long as wide, the outer joints barely two-fifths wider than long, the last ogival and as long as the two preceding; prothorax less than two-fifths wider than long, parallel, moderately and subevenly arcuate at the sides, not clearly impressed at base; elytra moderately transverse, with feebly diverging straight sides, at base about as wide as the prothorax, much wider at apex, the suture a third longer; abdomen narrower than the elytra, slender, very gradually and just visibly narrowing from near the base to apex, the fifth tergite fully one-half longer than the fourth; middle coxæ very slightly separated, the metasternum perfectly transverse medially, without trace of even an arcuation. Length 1.7 mm.; width 0.38 mm. California (Paraiso Hot Springs, Monterey Co.).

Seemingly the only species with which this can be compared is the more southern *perpera* Csy., but, although the head has about the same reduced development, *perpera* is blacker and a little stouter, with the elytra longer, more parallel and more punctured.

Atheta (Nemota) informalis n. sp.—Somewhat stouter than usual, rather convex, strongly shining, the micro-reticulation very feeble, large but feeble and polygonal on the elytra and abdomen; punctures very fine, not close or asperate; color deep black, the elytra scarcely less black, the legs black; head large, slightly wider than long, five-sixths as wide as the prothorax, the eyes at fully their own length from the base, the tempora parallel and arcuate, more prominent than the eyes, the carinæ wholly wanting; antennæ moderately long, rather thick, gradually and distinctly incrassate, black, the second and third joints subequal, the fourth obtrapezoidal, nearly as long as wide, the succeeding joints moderately transverse, the last large, ogival, rather longer than the two preceding; prothorax small, about a third wider than long, parallel and evenly, moderately rounded at the sides, scarcely at all impressed at base; elytra ample, slightly shorter than wide, with evidently diverging and almost straight sides, at base between a fourth and third wider, the suture one-half longer, than the prothorax, the apices somewhat rounded and oblique anteriorly toward the suture, not sinuate externally; abdomen slightly narrower than the elytra, much wider than the prothorax, parallel, with feebly arcuate sides, the subequal fourth and fifth tergites

each longer than one to three, which have the usual basal impression of *Atheta;* middle coxæ subcontiguous, the metasternum behind them transverse, with a small and feeble, broadly angulate wave-like median projection. Length 1.8 mm.; width 0.62 mm. California (Siskiyou Co.).

This is a decidedly distinct species in its stouter form of the hind body or relatively smaller anterior parts, and in its consequently different general habitus.

Atheta (**Nemota**) **marcescens** n. sp.—Slender, rather depressed and moderately shining, the micro-reticulation everywhere large, strong and polygonal, the punctures fine, not dense but, on the elytra, rather close and much rougher than anteriorly; color piceous-black, the head and abdomen deep black, the legs unusually short, piceous; pubescence very short, plumbeous; head large, nearly five-sixths as wide as the prothorax, fully as long as wide, evidently inflated and with broadly rounding sides basally, the eyes small, at fully one-half more than their own length from the base, the carinæ obsolete except basally; antennæ piceous, scarcely paler basally, short, slender, gradually and feebly incrassate, the third joint as long as the second, both long, the fourth as long as wide, fifth distinctly transverse and shorter than six to ten, the latter only very moderately transverse, the last as long as the two preceding; prothorax small, two-fifths wider than long, parallel, the sides slightly arcuate, straighter basally, the basal angles very obtuse but evident, the surface not clearly impressed; elytra subquadrate, about a fifth wider, the suture two-fifths longer, than the prothorax; abdomen slender, distinctly narrower than the elytra, parallel, the sides straight, the fifth tergite a third longer than the fourth; metasternum transverse and very feebly arcuate medially behind the narrowly separated coxæ. Length 1.7–2.0 mm.; width 0.33–0.38 mm. Colorado (Boulder Co.).

Distinguished by its flatter surface and far eastern habitat, all the other species being Californian; it seems however to be truly a member of the subgenus.

Subgenus **Hilara** Rey.

It is evident that there are many species of this subgenus inhabiting the Atlantic regions of America; they are generally very clearly differentiated among themselves by striking cephalic structure. The following is an additional species:

Atheta (**Hilara**) **fontis** n. sp.—Slender, parallel, rather convex, shining, the head black; prothorax, two basal segments and the apex of the abdomen pale testaceous, the elytra piceous-black, the legs pale; punctures fine, not close, sparse on the abdomen, the pubescence somewhat long, fine, moderately pale; head rather small, as long as wide, fully three-fourths as wide as the prothorax, parallel, the eyes small, at nearly twice

their length from the base, the tempora equally prominent, parallel and but very feebly arcuate, the carinæ very fine and only visible basally; antennæ black, testaceous basally and piceous at tip, short, rather thick, gradually and markedly incrassate, the first three joints rapidly decreasing in length, the third less than one-half longer than wide and strongly constricted at base, fourth and following strongly transverse, the outer joints rather more than twice as wide as long, the last obtusely ogival, a little longer than the two preceding and somewhat paler; prothorax two-fifths wider than long, subparallel, the sides subevenly and moderately arcuate, the basal angles obtuse and somewhat rounded, the median line very finely and feebly impressed throughout; elytra moderately transverse, with evidently diverging and nearly straight sides, at base barely visibly wider, the suture a fourth longer, than the prothorax; abdomen almost as wide as the elytra, perfectly parallel, with virtually straight sides to the tip of the fifth tergite, which is equal in length to the fourth, the sixth ventral plate in the type evenly semicircular. Length 1.6 mm.; width 0.31 mm. Pennsylvania (Buena Vista Spring, Franklin Co.).

The single type taken under fallen leaves during a very dry season in August last, near the summit of the Blue Ridge, represents a species differing conspicuously from any other in the very small eyes; in its rather small head it is allied somewhat to *nugator*, by which character it chiefly differs from *libens* (=*sejuncta*) and *validiceps*.

Subgenus **Adota** Csy.

The following species have come to light since my paper of 1910 appeared in print:

Atheta (Adota) definita n. sp.—Nearly parallel and subdepressed, deep black, the elytra scarcely picescent, the legs pale piceo-flavate; surface but very feebly shining and finely, densely micro-reticulate, the abdomen more shining and with the minute sculpture in relatively coarse, transversely wavy and broken lines; punctures fine, dense but indistinct, very numerous and close-set throughout on the abdomen; pubescence very short, close but inconspicuous; head four-fifths as wide as the prothorax, suborbicular, but little wider than long, the eyes very large, at half their length from the base, the tempora at first as prominent as the eyes but rapidly arcuate and converging to the base, the carinæ strong though extending only a little beyond the middle; antennæ rather long and almost filiform, slender, piceous, slightly paler basally, the third joint a little shorter than the second, fourth and following joints distinctly elongate, gradually becoming shorter, the tenth as long as wide, the last elongate-oval, scarcely so thick but as long as the two preceding; prothorax a full third wider than long, parallel, the sides more rounded anteriorly, converging and straighter thence to the base, transversely and feebly impressed before the scutellum; elytra parallel, but little shorter than wide, nearly flat, a fourth wider and nearly one-half longer than the prothorax; abdomen parallel, with straight sides, much narrower than

the elytra, the fifth tergite longer than the fourth; middle coxæ evidently separated, the blunt apex of the long mesosternal process moderately separated from the notably short and obtusely angulate metasternum. Length 2.4 mm.; width 0.6 mm. California (Santa Rosa and near Napa Junction).

Differs in many ways from the other described species, among which discordances are the flatter surface, more punctate abdomen and very much larger eyes.

Atheta (**Adota**) **scortea** n. sp.—Only feebly convex, alutaceous, the punctures very fine, not close and invisible because of the strong micro-reticulation, this relatively very large, polygonal and distinct on the strongly shining abdomen, where the punctures are fine but asperulate and notably sparse throughout; color dark piceous, the elytra but little paler, the legs paler but in great part blackish basally; head large, but little wider than long and only very slightly narrower than the prothorax, convex, the median line very feebly impressed at the centre, the eyes prominent, at slightly more than their own length from the base, the tempora just visibly more prominent, parallel and evenly, moderately arcuate, the carinæ wholly wanting; antennæ moderately long, notably thick, piceous-brown, gradually and slightly incrassate distally, the second and third joints equal, fourth slightly, the fifth just visibly, longer than wide, the joints thence more or less evidently transverse, the outer joints distinctly so, the tenth a little longer than the ninth, the last gradually and ogivally pointed, not quite so long as the two preceding; prothorax small, barely a fourth wider than long, widest and with the sides strongly rounded apically, thence rather strongly narrowed and with more feebly arcuate sides to the base, the surface feebly concave centrally; elytra but little shorter than wide, subparallel, almost one-half wider and three-fifths longer than the prothorax; abdomen much narrower than the elytra, perfectly parallel, the fourth and fifth tergites equal, the sixth (♂) feebly lobed medially at apex, the lobe rounded, feebly sinuate and with the adjacent surface feebly concave, medially, separated at each side from a small subglobular knob by an anteriorly oblique and feebly subsinuate line which is about as long as the width of the lobe, the sixth ventral rather narrowly parabolic at tip, broad at base; metasternal projection well developed, narrowly angulate. Length 2.5 mm.; width 0.63 mm. California (Berkeley, Alameda Co.)

Remarkably isolated in cephalic and antennal structure and in its small prothorax; the male sexual characters are somewhat as in *Stethusa irvingi*, the lateral spines replaced by short globular knobs.

Atheta (**Adota**) **scolopacina** n. sp.—Feebly convex, alutaceous, the feeble and well spaced punctures scarcely observable because of the very strong micro-reticulation, which, on the shining abdomen, is unusually large and evenly polygonal; color piceous-black, the elytra a little paler,

rufescent, the legs pale brown; pubescence short, stiff, subcinereous; head barely wider than long, almost four-fifths as wide as the prothorax, parallel, the eyes evidently prominent, at much more than their own length from the base, the tempora equally prominent, parallel and strongly, evenly rounded, more converging basally, the carinæ wholly wanting; antennæ piceous, long, slender, just visibly incrassate distally, the second joint evidently longer than the strongly obconic third joint and very much shorter and more slender than the first, four to six slightly longer than wide, seven to ten not quite so long as wide, the last acutely pointed, not as long as the two preceding; front feebly impressed on the median line centrally; prothorax a fifth wider than long, widest anteriorly, the sides there broadly rounded, thence slightly converging and nearly straight to the base, the surface with a very feeble transverse ante-scutellar impression; elytra large, almost as long as wide, subparallel, with very straight sides, almost a third wider and one-half longer than the prothorax; abdomen narrow and parallel, with straight sides, finely, sparsely punctulate, the tergites equal, the sixth (♂) arcuato-truncate at apex, the side angles obtuse but with the points sharp and slightly reflexed; in the middle there are two very feeble prominences, much less separated than either from the side angles, the sixth ventral evenly parabolic. Length 2.3 mm.; width 0.6 mm. California (Berkeley, Alameda Co.).

Not closely related to any other species but perhaps best placed near *gnypetoides*.

Atheta (Adota) insons n. sp.—Slender, very feebly convex, resembling the preceding in coloration and sculpture, the latter however feebler, so that the lustre is evidently shining throughout, the pubescence short and close; head as long as wide, only slightly narrower than the prothorax, the eyes small, moderately prominent, at almost one-half more than their own length from the base, the tempora scarcely so prominent, parallel and straight for a long distance, then rounding to the base, the carinæ wholly wanting; antennæ dark piceous, paler basally, only moderate in length, rather thick distally, the joints two to six equal in thickness and slender, the former about as long as the first but more slender, only a little longer than the third, four to six slightly elongate, seven to ten rather abruptly wider and feebly progressively incrassate, all evidently shorter than wide, the tenth a little longer than the ninth, the last about as long as the two preceding; median line of the front rather deeply impressed centrally; prothorax small, about a fourth wider than long, nearly as in the preceding, except that the sides are more narrowly rounded nearer the apex and thence nearly straight and evidently converging to the base; elytra quadrate, two-fifths wider and three-fifths longer than the prothorax; abdomen as in the preceding, except that the sixth tergite (♂) is transversely truncate at tip, the truncature limited at each side by a simple angle, which is minutely sharp and reflexed at tip, the sixth ventral almost circularly rounded. Length 2.2 mm.; width 0.46 mm. California (San Diego).

Very different from the preceding in the smaller size, less convex and more shining surface, conformation of the sides of the head and in the male sexual characters.

Atheta (Adota) pavidula n. sp.—Slender, subdepressed, parallel, strongly shining throughout, the micro-reticulation obsolete except on the elytra, large and almost regularly polygonal on the abdomen but very feeble; punctures minute, not dense, inconspicuous, rather numerous on the abdomen; pubescence moderately short and somewhat coarse, inconspicuous, longer and rather more distinct on the abdomen; color black, the legs pale, the prothorax and elytra very feebly picescent; head evidently wider than long, only very slightly narrower than the prothorax, the eyes large, prominent, at distinctly less than their own length from the base, the tempora less prominent, straight and parallel for a short distance, then gradually and evenly rounding to the base, the carinæ fine and not quite entire; antennæ long, very slender, gradually and just visibly incrassate, nearly black throughout, the second and third joints subequal, the fourth much elongated, fifth to seventh distinctly elongate, eight to ten somewhat abruptly a little wider and distinctly wider than long, mutually subequal, the last narrowly ogival, as long as the two preceding; prothorax two-fifths wider than long, just visibly widest before the middle, where the sides are broadly and feebly rounded, straight thence to the base, the transverse ante-scutellar impression rather deep and distinct; elytra subquadrate, with just visibly diverging sides, at base only very slightly wider, the suture nearly one-half longer, than the prothorax; abdomen narrower than the elytra, parallel, with straight sides, the tergites equal. Length 2.0 mm.; width 0.41 mm. California (Boonville, Mendocino Co.).

This species differs almost subgenerically from the two preceding, but I do not know where else to place it, as the coxæ do not seem to be sufficiently contiguous to admit of association with *Hydrosmecta*, in spite of the very slender and subfiliform antennæ. There are no distinct indications of sex in the unique type.

Atheta (Adota) irrita n. sp.—Not parallel, slightly convex, distinctly shining, the micro-reticulation everywhere distinct, feeble on the head, large and almost regularly polygonal though feeble on the abdomen; color black throughout, the legs pale, the femora in great part blackish; punctures fine, close but scarcely visible, rather sparse on the abdomen; pubescence very short, plumbeous and inconspicuous; head almost as wide as long, four-fifths as wide as the prothorax or a little less (♀), the eyes moderate, prominent, at their own length from the base or less, the tempora equally prominent, parallel and rounded for less than the length of the eyes behind them, then rounding to the base, the carinæ obsolete; antennæ black, only moderately long, rather slender though gradually and distinctly incrassate, the third joint almost as long as the first, strongly, evenly obconic, four to ten mutually subsimilar but

increasing in size and all distinctly transverse, the tenth longer than the ninth, the last barely as long as the two preceding, pointed; prothorax about a third wider than long, widest and with the sides moderately rounded anteriorly, the sides very slightly converging and nearly straight thence to the base, the surface very broadly and feebly flattened medially, except near the apex, and with a feeble transverse basal impression; elytra large, quadrate, a third wider and three-fifths longer than the prothorax; abdomen much narrower than the elytra, parallel, with straight sides, the tergites equal, the sixth (♂) very broad, feebly and evenly sinuato-truncate, the sides of the truncature marked by simple angles, the sixth ventral broadly parabolic; middle coxæ narrowly separated, the metasternal projection moderate in size but elongate and acutely angular. Length 2.2 mm.; width 0.52–0.58 mm. Nevada (Esmeralda Co.),—Nunenmacher.

Also aberrant, especially in its shorter and very differently constituted antennæ. The median line of the head is impressed centrally as in the other species here described.

Paradilacra Bernh.

The rather numerous species of this group differ among themselves in the nature of the abdominal impressions to a somewhat radical degree; also in the form and convexity of the body and in the antennæ. The type of the genus, named *densissima* by Bernhauer, apparently has notably large eyes, the prothorax narrowed gently toward base from well before the middle and the transverse impression of the third tergite obsolete; the following is a closely allied species:

Paradilacra symbolica n. sp.—Rather stout, subparallel and convex, dull in lustre and extremely finely and closely punctured throughout to the tip of the abdomen; piceous-black in color, the elytra not paler, the legs slightly paler, piceous; pubescence short, rather coarse, not sericeous and only slightly pale; head large, nearly as wide as long, fully three-fourths as wide as the prothorax, feebly triangular, being perceptibly swollen at base, the eyes large, at three-fourths their length from the base, the carinæ wanting; antennæ moderately long, gradually and very feebly incrassate, blackish-piceous, scarcely paler basally, the third joint only just visibly shorter than the second, the fourth distinctly, the fifth only just visibly, longer than wide, the outer joints feebly transverse, the last fully as long as the two preceding; prothorax barely a third wider than long, widest near apical third, where the sides are distinctly rounded, thence very evidently converging and straight to the base, the median line finely, very feebly impressed basally, the impression broadening to the base; elytra subparallel, slightly transverse, about a fifth wider, the suture nearly a third longer, than the prothorax; abdomen

parallel throughout, with straight sides and rather thick margins, evidently narrower than the prothorax, the fourth and fifth tergites equal, the first two equally and deeply impressed transversely at base, the third not impressed but with a fine and obsoletely subimpressed line along the basal margin; middle coxæ well separated, the small but narrowly parabolic metasternal projection separated from the rather obtuse point of the long mesosternal process by a relatively short deep interval; first three joints of the hind tarsi decreasing rapidly in length. Length 2.4 mm.; width 0.6 mm. California (Napa Junction).

Differs from *densissima* in the longer third antennal joint, in the deep and not "schwach" impressions of the first two tergites and in some other minor features. This and the aberrant *diserticola* are the only species in my collection agreeing with the generic diagnosis in having no concavity at the base of the third tergite; two sections in the genus are therefore apparently indicated.

Paradilacra erebea n. sp.—More slender and rather less convex, nearly parallel, a little less dull in lustre, the minute punctures close-set throughout; color piceous-black, the head and abdomen deep black, the legs in great part piceous-black; pubescence fine, very short, dusky, not at all sericeous; head smaller, not quite three-fourths as wide as the prothorax, nearly as long as wide, the eyes large, at about two-thirds their length from the base, the tempora only just perceptibly more prominent and evenly rounded, converging slightly upon the eyes; antennæ only moderately long and notably slender, piceous-black, gradually and very feebly incrassate, the third joint distinctly shorter than the second, the next five distinctly elongate, the ninth and tenth subequal and just visibly shorter than wide, the last slightly shorter than the two preceding; prothorax nearly two-fifths wider than long, subparallel, the sides very feebly and broadly arcuate, becoming slightly straighter but not definitely converging basally, the base feebly impressed before the scutellum; elytra moderately transverse, only a sixth or seventh wider, the suture about a third longer, than the prothorax; abdomen distinctly narrower than the elytra, parallel, narrowing very slightly at tip, the abdominal impressions more shining than the rest of the surface. Length 2.4 mm.; width 0.48 mm. California (Napa Junction and near Mt. Diablo).

Distinguishable at once from the preceding and *densissima*, in having the basal impressions of the first three tergites broadly concave, deep and equal; it thus represents a different section of the genus.

Paradilacra subæqua n. sp.—Moderately stout and convex, subparallel, extremely minutely and densely punctate, dull and black throughout, the legs piceous-black; head notably small, two-thirds as wide as the prothorax, but little wider than long, the eyes, oblique, only moderate and at rather more than their own length from the base, the tempora a

little more prominent, parallel and rounded; antennæ long, blackish throughout, notably slender and subfiliform, the third joint two-thirds as long as the second, fourth to seventh much longer than wide, the fourth the narrowest, eight to ten short, mutually subsimilar and fully as long as wide or a little longer, the last gradually pointed and as long as the two preceding or very nearly; prothorax well developed, fully two-fifths wider than long, but little widest and with the sides broadly rounded anteriorly, thence but slightly narrowed and with straight sides to the base, the median line very feebly and not finely impressed throughout but more broadly toward base; elytra subparallel, moderately transverse, only about a sixth wider and barely a third longer than the prothorax; abdomen parallel, distinctly narrower than the elytra, the fourth and fifth tergites subequal, the first three with the basal impressions only moderately wide and rather sharply though moderately concave, subequal. Length 2.1 mm.; width 0.51 mm. California (Santa Rosa).

Distinguishable by the very slender and subfiliform antennæ, rather small head and eyes and other features.

Paradilacra sinistra n. sp.—Rather stout, moderately convex, parallel, the coloration, very minute dense sculpture and dull lustre as in the preceding, the elytra however perceptibly piceous-brown; head well developed and much wider than long, fully two-thirds as wide as the prothorax, the eyes moderate, at their own length from the base, the tempora notably more prominent, parallel and rounded; antennæ long, slender, subfiliform though very slightly and gradually incrassate distally, the third joint only a little shorter than the second, four to six very much, seven to ten more or less evidently, longer than wide, the last slender, very nearly as long as the two preceding; prothorax unusually developed, two-fifths wider than long, widest and rather strongly rounded at the sides anteriorly, thence very distinctly narrowing and with nearly straight sides to the base, the median line very feebly impressed throughout, very broadly and rather deeply toward base; elytra distinctly transverse, subparallel, at base barely discernibly wider than the prothorax, the suture about a fourth longer, impressed rather broadly behind the scutellum; abdomen parallel, with rather thick margins, narrower than the elytra, the fourth and fifth tergites equal, the impressions of the first three rather broadly and deeply concave, more shining than the rest of the surface and subequal. Length 2.2 mm.; width 0.58 mm. California (San José and Sta. Clara Valley).

Differs from the preceding in its broader prothorax and larger head, slightly less slender and more sensibly thicker distal part of the antennæ and in its broader, more concave and more equal three transverse basal impressions of the abdomen; from *densissima* it differs in its less developed eyes, relatively less abbreviated third antennal joint and in the distinct and subequal abdominal impressions.

Paradilacra memnonia n. sp.—More slender, black throughout, the legs in great part black, the lustre rather less dull than in any of the preceding, except the elytra which are similarly opaque, the minute punctures very close-set but not quite so dense, especially on the abdomen; head but little wider than long, three-fourths as wide as the prothorax, the eyes moderate, at rather more than their own length from the base, the tempora very little more prominent, parallel and broadly rounded; antennæ only moderately long, thicker than in the preceding and gradually though very evidently incrassate distally, the third joint more slender though scarcely visibly shorter than the second, four to six slightly elongate, seven to ten passing from as long as wide to evidently wider than long, the last about as long as the two preceding; prothorax relatively rather small, a third wider than long, widest anteriorly, the sides there broadly rounded, sensibly converging and nearly straight thence to the base, the median line not at all impressed, the surface with a very feeble transverse ante-scutellar impression; elytra moderately transverse, scarcely visibly picescent, subparallel, fully a fourth wider, the suture nearly a third longer, than the prothorax; abdomen much narrower than the elytra, parallel, the three basal impressions subequal, rather broadly concave, more shining and with scattered and slightly larger punctures. Length 2.6 mm.; width 0.58 mm. California (Cloverdale, north of Sta. Rosa).

This species may be known by its very moderate eyes, sensibly incrassate antennæ, rather less dense punctures of the abdomen and smaller prothorax, without an impressed median line but with a fine feeble transverse basal impression, which is unobservable elsewhere.

Paradilacra persola Csy., has much shorter antennæ than any other California form known to me, but they are very slender and subfiliform; I have discovered another example in my cabinet, taken at San Francisco.

Paradilacra vulgatula n. sp.—Small and slender, piceous-black, the head and abdomen deep black, the legs blackish; lustre dull, the minute and very dense punctures becoming less minute and more separated on more or less of the three basal tergites; pubescence short and close; head rather small, subtriangular, distinctly inflated basally, a little wider than long and nearly three-fourths as wide as the prothorax, the eyes well developed, at a little less than their own length from the base; antennæ piceous-brown, only moderately long, very slender and but just visibly incrassulate, the third joint not evidently shorter than the second, four to six distinctly longer than wide, seven to ten very little shorter than wide, the last almost as long as the two preceding; prothorax nearly two-fifths wider than long, widest anteriorly, where the sides are rather broadly rounded, thence evidently converging and straighter to the base, the basal impression small, rounded and almost

obsolete; elytra distinctly transverse, with diverging and nearly straight sides, at base a fifth or sixth wider, the suture fully a fourth longer, than the prothorax; abdomen parallel, much narrower than the elytra, with straight sides, the equal fourth and fifth tergites each longer than one to three, the basal impressions of which are rather narrow but distinct and subequal. Length 2.1 mm.; width 0.43 mm. California (Jountville, Napa Co.).

Recognizable by its small size, somewhat slender form, transverse prothorax and elytra, rather small and subtriangular head and slender, moderate antennæ; the type is a mature example of the species represented by the immature one alluded to in my last paper and is from the same locality.

Paradilacra deserticola n. sp.—Moderately slender, parallel, evidently convex, not dull, feebly shining, the abdomen evidently so; color deep black throughout, the legs black, picescent distally; punctures minute and close but not dense, the minute ground sculpture much feebler than usual, the abdominal punctures close but clearly separated; head wider than long, well developed, four-fifths as wide as the prothorax, only just visibly swollen basally, the eyes at three-fourths their length from the base; antennæ piceous, rather slender, feebly incrassulate distally, only moderately long, the second joint longer than the first, third three-fourths as long as the second and more slender, four to six slightly elongate, seven to ten a little shorter than wide, the last about as long as the two preceding; prothorax fully a third wider than long, the sides broadly rounded anteriorly, feebly converging and nearly straight from scarcely before the middle to the base, the median line feebly impressed in about basal half; elytra moderately transverse, parallel, a fourth or fifth wider, the suture a fourth longer, than the prothorax; abdomen parallel, with straight sides, much narrower than the elytra, the fifth tergite two-fifths longer than the fourth, the first distinctly though narrowly, the second scarcely and the third not visibly impressed transversely at base. Length 1.8 mm.; width 0.4 mm. Nevada (Elko),—Wickham.

May be known by its rather narrow form and small size, as well as by the antennal and abdominal structure, less dull lustre and less than usually pronounced sculpture.

Metaxya Rey.

This is a large genus in the American fauna and the species assignable to it, though agreeing in general structural peculiarities, present great diversification in form, size and other characters—probably indicative of subgeneric groups.

Metaxya albanica n. sp.—Not parallel, feebly convex, subalutaceous, the head and abdomen shining, the micro-reticulation small and strong,

larger and feebler on the more shining parts, where the punctures are also fine and sparse, fine and rather close but obscure on the pronotum and elytra; color pale red-brown, the head and abdomen blackish-piceous, the latter broadly rufescent basally and at apex, the elytra pale brownish-flavate, feebly infuscate about the scutellum, the legs pale; pubescence pale, short, rather abundant and distinct; head slightly wider than long, nearly four-fifths as wide as the prothorax, parallel and evenly arcuate at the sides, the eyes but slightly prominent, at more than one-half more than their length from the base, the carinæ fine, not quite entire; prothorax scarcely a fourth wider than long, subparallel, the sides feebly arcuate, just visibly widest before the middle, the basal angles rounded, the median line feebly impressed almost throughout; elytra slightly shorter than wide, the sides feebly diverging and straight, at base a fourth wider, the suture two-fifths longer, than the prothorax; abdomen much narrower than the elytra, parallel, the fifth tergite nearly one-half longer than the fourth; middle coxæ contiguous, the sunken ridge between the short and very acute mesosternum and the transverse and feebly, medially arcuate metasternum very long and acute; four basal joints of the hind tarsi equal, the fifth as long as the three preceding. Length 2.2 mm.; width 0.45 mm. New York (Catskill Mts.).

Allied to *impotens* Csy., but differing in its paler coloration, much smaller head and prothorax, smaller eyes and more parallel and evenly rounded and less basally inflated sides of the head, with much more broadly rounded basal angles; the antennæ are missing in the single specimen before me, which was discovered among a series of *Gyronycha fusciceps;* but they are probably not far unlike those of *impotens.*

Metaxya awemeana n. sp.—Large, rather stout and convex, shining, black, the elytra, except a feeble and vague basal infumation, and the abdominal apex, paler, brownish-testaceous, the legs pale, piceo-flavate; punctures very fine, rather close but inconspicuous, dense though very fine on the more alutaceous elytra but not asperate, somewhat close on the abdomen except apically, the micro-reticulation there very small and confusedly subtransverse; pubescence fine and very short; head moderate, but little wider than long, three-fifths as wide as the prothorax, the eyes convex and prominent, at their own length from the base, the tempora less prominent, at first parallel, then rounding to the base, the carinæ distinct, entire; front evenly convex; antennæ long and very slender, slightly and gradually enlarged apically, black or nearly so throughout, the second joint as long as the first, two to four decreasing distinctly and evenly in length, four to six equal, much elongated, seven to ten a little wider and also gradually slightly increasing though mutually of equal length, the last slender, elongate-oval, sharply pointed, nearly as long as the two preceding; prothorax two-fifths wider than long, parallel, with evenly and moderately rounded sides and a very small elongate impression before the scutellum; elytra but slightly shorter than wide,

with very feebly diverging and nearly straight sides, at base very slightly wider, the suture nearly two-fifths longer, than the prothorax, the apices not at all sinuate externally; abdomen parallel, with straight sides, slightly narrower than the elytra, the fifth tergite notably longer than the fourth, the sixth ventral in the type with arcuately converging sides, the apex arcuato-truncate; middle coxæ contiguous, the metasternum behind them very short and broadly angulate. Length 3.0 mm.; width 0.85 mm. Manitoba (Aweme),—Norman Criddle.

A fine species, recognizable by its long antennæ, fine sculpture, coloration and other features.

Metaxya prognata n. sp.—Large, narrower, subparallel, moderately convex, shining, minutely and not densely punctured, the micro-reticulation small and very feeble, close and transversely substrigilate toward the turgitical apices; color piceous, the elytra a little paler, the abdomen blackish, becoming largely very pale at apex, the pubescence rather coarse and not very short, pale; head slightly transverse, nearly four-fifths as wide as the prothorax, parallel and very feebly arcuate at the sides, the eyes scarcely prominent and at evidently more than their own length from the base; antennæ blackish, long, very gradually rather heavy outwardly, the second joint as long as the first but much more slender, the third distinctly shorter than the second, one-half longer than the fourth, which is moderately elongate and equal to the fifth, six to ten more obtrapezoidal and passing from as long as wide to evidently wider than long, the last not very acute at tip and not quite as long as the two preceding; prothorax only about a fifth wider than long, subparallel and feebly arcuate at the sides, the latter perhaps more nearly straight basally, the basal angles very obtuse and blunt, the median line very feebly impressed almost throughout and also with a very small ante-scutellar impression; elytra moderate, not long, at base a fifth or sixth wider, the suture not at all longer, than the prothorax but equal in length to the latter; abdomen parallel, with straight sides, slightly narrower than the elytra, long, the fifth tergite but little longer than the fourth, the punctures minute and not very close; middle coxæ contiguous or virtually so, the metasternum very short and broadly angulate. Length 3.4 mm.; width 0.8 mm. British Columbia (Metlakatla),—Keen.

Differs from the preceding in its more slender form, stouter antennæ, narrower prothorax, shorter elytra and much less close though equally fine punctulation. The sixth ventral plate in the type is large, with the sides rapidly converging and but slightly arcuate, the apex evenly but relatively somewhat narrowly rounded.

Metaxya badeola n. sp.—Moderately slender and convex, shining, dark piceo-rufous, the head and abdomen black, the latter barely at all paler at tip, the legs piceous though in part paler; punctures fine, well separated, rather sparse on the abdomen, the minute sculpture very feeble; pubescence rather long and somewhat coarse; head fully as long

as wide, parallel and feebly, evenly arcuate at the sides, widest across the middle of the tempora, which there are a little more prominent than the eyes, the latter small, at fully one-half more than their own length from the base, the carinæ wholly wanting, except finely and feebly at base; antennæ moderately long, blackish with the basal joint paler, moderately slender, gradually becoming notably thick distally to the apex, the second joint as long as the first, the third a little shorter, two-thirds longer than the fourth, which is a little longer than wide, the outer joints transverse, the tenth fully a third wider than long, the last acutely ogival, shorter than the two preceding; prothorax but very little wider than long, parallel and evenly, very moderately rounded at the sides, the median line very finely and feebly impressed in about basal half and with a small feeble rounded ante-scutellar impression; elytra but slightly transverse, with somewhat diverging straight sides, at base but very little wider, the suture two-fifths longer, than the prothorax, the apices not at all sinuate; abdomen at base slightly narrower than the elytra, the sides just perceptibly converging and nearly straight thence to the apex of the fifth tergite, which is barely at all longer than the fourth; middle coxæ contiguous, the metasternal line behind them transverse and almost straight. Length 3.0 mm.; width 0.7 mm. California (San Mateo Co.),—Baker.

Very distinct from the two preceding in having no infra-lateral cephalic carinæ except basally, in its smaller and more anterior eyes and in the transverse and not more than feebly arcuato-truncate metasternal line behind the coxæ. Both the upper and lower plates of the sixth abdominal segment are very broad and obtusely rounded in the female type.

The following may be regarded as a subspecies of *badeola*, for it is so similar in most of its structural characters that it would seem best not to give it full specific value without further light on the subject:

Metaxya mateana n. subsp.—Similar to *badeola* in general characteristics of sculpture, vestiture and coloration but very much smaller in size and more parallel in form; head similar though relatively larger, the antennæ of like construction but not quite so thick, the joints after the fourth similarly abruptly thicker than one to four but not so markedly so and thence rather less incrassate to the tip, the fifth distinctly longer than wide, tenth very little wider than long; prothorax also relatively larger and about as wide as the elytra, of nearly similar form and dorsal impression but almost as long as wide; abdomen narrower and parallel, the sixth ventral in the type only three-fifths as wide as the fifth tergite and broadly rounded. Length 2.2 mm.; width 0.55 mm. California (San Mateo Co.),—Baker.

I think it hardly possible that these two forms could have any closer relationship than that indicated; the infra-lateral cephalic

carina extends from the base to the middle and is more distinct than in *badeola*.

The three following species differ from more typical *Metaxya* in the shorter and strongly incrassate antennæ, with short transverse outer joints, but the body has nearly the same parallel form and the middle coxæ are contiguous, with the metasternal process short or very moderate:

Metaxya erudita n. sp.—Almost perfectly parallel, moderately convex, dull in lustre, the punctures very fine and close, more separated though very numerous on the more shining abdomen, where the minute sculpture is not very small and is in subtransverse broken lines; color pale piceous-brown, the head and abdomen blackish, the latter at tip and the elytra paler and more yellowish, the scutellar region broadly and feebly infumate, the legs very pale; pubescence rather coarse, pale and distinct; head very large, slightly wider than long, four-fifths as wide as the prothorax, convex, with a small subobsolete rounded central impression; eyes prominent, at very little more than their own length from the base, the tempora rounded and just visibly more prominent, the carinæ fine but entire; antennæ short, very pale, gradually feebly infuscate and strongly incrassate distally, the third joint evidently shorter and more obconic than the second, the fourth distinctly transverse, the outer joints one-half wider than long, the last stout, obtusely ogival and as long as the two preceding; prothorax two-fifths wider than long, parallel and feebly, evenly arcuate at the sides from the basal to the apical angles, the median line feebly and rather broadly impressed at base and apex only; elytra slightly transverse, subparallel, barely at all wider, the suture only just visibly longer, than the prothorax; abdomen narrower than the elytra, perfectly parallel, with straight sides, the fifth tergite evidently longer than the fourth. Length 2.6 mm.; width 0.62 mm. Manitoba (Aweme), —Criddle.

Recognizable by its pallid coloration, parallel form and notably large head.

Metaxya surrufa n. sp.—Parallel, rather depressed, the coloration very pallid but throughout nearly as in the preceding, the lustre rather dull, the punctures fine, somewhat close, the abdomen more shining and with the moderately numerous punctures slightly more asperate, the ground sculpture nearly similar, not at all dense and rather feeble; pubescence almost similar; head nearly similar but smaller and more transverse, three-fourths as wide as the prothorax and without central impression, the carinæ very fine and not entire; antennæ smaller, similar in coloration and gradually rather strongly incrassate distally, the third joint much shorter than the second and less than one-half longer than wide, obconic, four to ten strongly transverse, nearly as in the preceding, though still shorter; prothorax much shorter, one-half wider than long, parallel, somewhat widest, though with the subprominent sides broadly

obtuse, a little before the middle and thence feebly converging and straight to both apical and basal angles, unimpressed; elytra small, subquadrate, barely as wide as the prothorax, the suture a third longer; abdomen parallel, only just visibly narrower than the elytra, the fifth tergite distinctly longer than the fourth. Length 2.4 mm.; width 0.58 mm. Manitoba (Aweme),—Criddle.

Though evidently allied to the preceding and from the same locality, I am unable to decide upon any true subspecific relationship between the two forms; the smaller and more transverse head, much smaller and shorter third antennal joint, shorter prothorax, with the sides subprominent before the middle and the smaller, subquadrate elytra, impart so different a facies, that in my opinion it cannot be anything less than a distinct species.

The following species is peculiar in its fusiform outline and probably cannot be retained in *Metaxya*, although the middle coxæ are closely contiguous and the metasternum transverse behind them:

Metaxya varula n. sp.—Rather stout, moderately convex, black throughout, the elytra only just visibly picescent, the legs rather pale flavopiceous; lustre feebly shining, the surface finely, closely, subasperulately punctate, the abdomen rather more strongly and asperately, somewhat closely so, more sparsely toward tip and with the micro-reticulation extremely fine and dense in transverse wavy lines; pubescence short and palish; head very small, less than three-fifths as wide as the prothorax, nearly as long as wide, parallel and feebly arcuate at the sides, the eyes but very slightly prominent and not more so than the tempora, at much more than their own length from the base; front evenly convex, the carinæ fine but entire; antennæ black, notably long, gradually and only very slightly incrassate, moderately thick, the second and third joints very long, subequal, the fourth fully one-half longer than wide, the tenth fully as long as wide, the last slender, elongate-oval, as long as the two preceding; prothorax large, suborbicular, a third wider than long, the apex much narrower than the base, the sides evenly and strongly rounded from base to apex, the basal angles obtuse and rounded; surface with a small obsolescent rounded ante-scutellar impression; elytra still larger, moderately transverse, with very feebly diverging sides, at base a fifth or sixth wider, the suture about a fourth longer, than the prothorax; abdomen parallel, with straight sides, distinctly narrower than the elytra, the tergites short, the fifth longer than the fourth. Length 2.8 mm.; width 0.8 mm. Manitoba (Aweme),—Criddle.

Remarkably different from any other development of the *Metaxya* group known to me. Sexual characters are not apparent in the single type at hand.

The following species is appended provisionally:

Metaxya criddlei n. sp.—Rather convex, not parallel, shining, black, the elytra very slightly paler, the abdominal tip faintly pallescent, the legs short, pale; punctures very fine, moderately close, sparse on the abdomen; pubescence rather coarse, not very short; head only slightly wider than long, four-fifths as wide as the prothorax, the eyes moderately prominent, at nearly their own length from the base, the tempora very nearly as prominent, parallel for some distance, then broadly rounding, the carinæ wholly wanting; antennæ blackish, piceous basally, only moderately long, gradually and distinctly incrassate, the first two joints subequal in length, the third slightly shorter, fourth slightly, the fifth rather more distinctly, longer than wide, tenth one-half wider than long, the last as long as the two preceding; prothorax only very slightly wider than long, subparallel, with scarcely at all arcuate sides, perhaps just visibly wider near the apex than at base, the sides rounding at apex, unimpressed; elytra very nearly as long as wide, with feebly diverging sides, at base a fourth wider, the suture fully two-fifths longer, than the prothorax, the apices not sinuate laterally; abdomen parallel, with straight sides, distinctly narrower than the elytra, the first four tergites transversely and rather deeply impressed at base, the fourth not quite so deeply as the others, the fifth much longer than the fourth; sixth ventral in the type broadly arcuato-truncate at apex; tarsi rather stout, the first four joints of the posterior equal, the fifth shorter than the preceding three combined; middle coxæ contiguous, the metasternum transversely and very obtusely subangulate behind them. Length 2.3 mm.; width 0.56 mm. Manitoba (Aweme), —Norman Criddle.

A very aberrant species and probably not a *Metaxya*, in view of the abdominal impressions, absence of cephalic carinæ, short legs and other discordant characters. It has somewhat the facies of an Aleocharinid near *Phlœopora*, but the anterior tarsi are unquestionably 4-jointed; the hypomera are flat, feebly inflexed and wholly visible from the sides.

Aloconota Thoms.

The following species has a relatively still smaller prothorax than any of the European or eastern American forms:

Aloconota flexibilis n. sp.—Moderately convex and strongly shining, deep black throughout, the elytra barely visibly picescent, the legs long, slender, blackish, paler distally; punctures fine, not close except on the elytra, where they are but feebly asperate, minute and very sparse on the abdomen, where the minute sculpture is in the form of relatively large and slightly transverse polygons; pubescence short, plumbeous; head small, fully as long as wide and fully as wide as the prothorax, the eyes prominent, somewhat shorter than the less prominent parallel tempora, the median line obsoletely impressed centrally, the carinæ wanting; antennæ moderately long, extending to about basal third of the

elytra, black, moderately and very gradually incrassate, the first three joints long, equal in length, the fourth slightly elongate, five to nine increasing but slightly in size, mutually similar, as long as wide, the tenth wider than long and abruptly a little wider, though of the same length, as the ninth, the last gradually acutely pointed, barely as long as the two preceding; prothorax small, a fifth wider than long, widest before the middle, where the sides are broadly rounded, thence moderately converging and straight to the distinct basal angles, convex, the median line very finely and obsoletely impressed, broadly subdepressed basally, where there is a rather deep rounded ante-scutellar pit; elytra large, moderately transverse, parallel, the sides very feebly rounding and subinflated posteriorly, at base one-half wider, the suture nearly one-half longer, than the prothorax, the apices truncate externally; abdomen long, slightly narrower than the elytra, parallel, the fifth tergite but little longer than the fourth; middle coxæ contiguous medially through a much shorter distance than usual, the metasternal projection very large, nearly as long as wide and sharply angulate. Length 3.5 mm.; width 0.75 mm. Mexico (Saltillo, State of Coahuila),—Wickham.

This distinct species does not appear to have been included with the material worked up by Dr. Sharp for the "Biologia."

Hydrosmecta Thoms.

This genus, like many others founded upon European stem forms, is composite and will necessitate the formation of numerous subgenera; the three following species are passably conformable to the generic type, though including two types of antennal structure:

Hydrosmecta odiosica n. sp.—Very slender, but feebly convex, perfectly parallel, dull in lustre, the fine sculpture strong throughout, the punctures fine, close-set and asperulate, the abdomen but little more shining; vestiture s ort and abundant, grayish; color piceous-black throughout, the abdomen moderately pale at apex, the legs piceous-brown; head subquadrate, very nearly as wide as the prothorax, very little wider than long, the eyes well developed, at barely their own length from the base, the tempora parallel, subequally prominent or just visibly swollen basally; antennæ long, very slender, scarcely at all incrassate, blackish throughout, extending to about the tips of the elytra, all the joints much longer than wide, the second distinctly longer than the third, the tenth nearly one-half longer than wide, eleventh long, cylindric, almost as long as the two preceding; prothorax but very slightly wider than long, slightly widest at apex, the sides thence feebly converging posteriorly and only slightly arcuate, the median line distinctly impressed from just before the middle to the base; elytra parallel, fully as long as wide or apparently a little longer, equal in width to the widest part of the prothorax, the suture about a third longer; abdomen long, barely visibly narrower than the elytra, parallel, with perfectly straight sides, the first three tergites increasing slightly in length, the first impression

distinct, the other two feeble, the fifth tergite one-half longer than the fourth. Length 1.7 mm.; width 0.28 mm. California (Sta. Rosa, Sonoma Co., and Gilroy Hot Springs, Sta. Clara Co.).

The long slender subfiliform antennæ will distinguish this species very readily from the next; it differs very much in general appearance from the eastern *caduca*, due to the less prominent eyes, relatively narrower elytra, as well as other characters of importance.

Hydrosmecta fastidiosa n. sp.—Very slender, feebly convex, rather distinctly shining, the micro-reticulation feebler, large and polygonal on the abdomen; punctures fine, asperulate and close-set, finer and rather more separated on the abdomen; color piceous-black, the elytra and the abdominal tip just visibly paler, the legs pale, piceous; vestiture very fine, short and inconspicuous; head as long as wide, barely visibly narrower than the prothorax, the eyes anterior, slightly prominent, at much more than their own length from the base, the tempora gradually and but just visibly swollen basally, the carinæ wholly wanting; antennæ uniform dark piceous-brown, very slender, scarcely at all incrassate, but little longer than the head and prothorax, the second joint much longer than the third, the fourth nearly as long as wide, shorter than five and following, which are mutually subsimilar and about as long as wide, the last subcylindric, as long as the two preceding; prothorax a fourth wider than long, parallel, with moderately and subevenly rounded sides, the median line rather widely impressed throughout; elytra parallel, nearly as long as wide, a fourth wider and one-half long r than the prothorax; abdomen long, slender, parallel, with straight sides, distinctly narrower than the elytra, the fifth tergite nearly one-half longer than the fourth. Length 1.5 mm.; width 0.26 mm. California (Sta. Cruz, Sta. Cruz Co.).

From *benigna* this species differs in its more slender form, notably less convex surface and smaller and less prominent eyes; from *jugalis* it differs also in its smaller eyes, smaller size and narrower and less convex form; *benigna* differs very much from *jugalis* in antennal structure and in its larger, more parallel and more transverse prothorax, among other characters.

Hydrosmecta salinasica n. sp.—Minute, parallel, feebly convex, dull and minutely, closely and obscurely punctulate, the head more shining and with more distinct punctures, the abdomen shining, extremely minutely and sparsely punctulate; pubescence short, close, cinereous, abundant and distinct, except on the head and abdomen where it is sparse; color very dark and uniform piceous-brown, with pale legs, the abdomen indefinitely blackish subposteriorly; head nearly as long as wide, just visibly narrower than the prothorax, the eyes slightly prominent, at a little more than their own length from the base, the tempora parallel, somewhat swollen, evenly arcuate and rather more prominent than the eyes; antennæ slender, moderately long, just visibly incrassulate,

dark brown, the second joint as long as the first and about as long as the next two, the third slightly elongate, obconic, fourth transverse, the tenth barely as long as wide, the last obtuse at tip, as long as the two preceding; prothorax short, nearly two-fifths wider than long, widest near the apex, the sides thence distinctly converging and scarcely at all arcuate to the obtuse and rather blunt basal angles, the median line feebly impressed, gradually rather more widely and evidently basally; elytra longer than wide, parallel, with straight sides, very slightly wider and three-fifths longer than the prothorax; abdomen parallel, with straight sides, barely visibly narrower than the elytra, the fifth tergite one-half longer than the fourth. Length 1.4 mm.; width 0.24 mm. California (Paraiso Springs, Valley of the Salinas River, Monterey Co.).

Not closely allied to any other species and recognizable at once by the very small size, slender parallel form, unusually short prothorax, long elytra and other features as stated.

The following species is Mexican and is so aberrant that it will in all probability be separated at least subgenerically at some future day:

Hydrosmecta depresseola n. sp.—Parallel, distinctly depressed, dull in lustre, finely, rather closely punctate, the abdomen less closely, more shining and with the minute sculpture feeble, not dense and subtransverse; color black throughout, the legs blackish, paler distally; pubescence notably long, abundant, plumbeous but distinct; head slightly wider than long, four-fifths as wide as the prothorax, unimpressed, the eyes prominent, at a little less than their own length from the base, the tempora slightly more prominent and still more strongly rounded, the carinæ fine, not quite entire; antennæ piceous, paler basally, slender, rather long, only feebly incrassulate distally, the third joint a little shorter than the second, both very slender, fourth much elongated, fifth to seventh distinctly, the eighth to tenth slightly, longer than wide, the last slender, barely as long as the two preceding; prothorax fully a third wider than long, widest before the middle, where the sides are broadly rounded, thence sensibly converging and straight to the base, the median line not finely, very feebly and equally impressed throughout; elytra feebly transverse, at base a fifth or sixth wider, the suture two-fifths longer, than the prothorax, the humeri distinctly exposed at base; abdomen long, much narrower than the elytra, parallel, with the sides straight, the fifth tergite distinctly longer than the fourth; middle coxæ contiguous, the metasternum behind them transverse; two basal joints of the hind tarsi equal, each longer than three or four. Length 2.6 mm.; width 0.47 mm. Mexico (Guadalupe, Federal District),—Wickham.

Recognizable by the form of the head, antennæ and prothorax and also by the rather conspicuous pubescence.

Dimetrota Rey.

The truly typical members of this genus occurring in North America seem to be confined to the Pacific regions, when they are very numerous and frequently above the average in point of size; the following are some that are additional to those previously described by the writer and others:

Dimetrota immerita n. sp.—Stout, moderately convex, alutaceous, finely, closely and asperately punctate throughout anteriorly, with fine and numerous punctures on the shining abdomen, becoming subobsolete and very sparse apically; color somewhat bronzy-black, the abdomen deep black, the elytra pale, piceo-flavate, infuscate about the scutellum, the legs moderately pale, piceous-brown; pubescence fine, short and palish; head nearly as long as wide, fully three-fifths as wide as the prothorax, parallel and evenly arcuate at the sides, the eyes not prominent but large, at evidently less than their own length from the base, the carinæ fine but distinct; antennæ black throughout, rather long, gradually and moderately incrassate, the third joint distinctly longer than the second and as long as the first, fourth a little longer than wide, the fifth as wide as long, the succeeding joints slightly transverse, the ninth and tenth mutually similar, the last ogivally acute, as long as the two preceding; prothorax rather small, one-half wider than long, parallel and feebly arcuate at the sides, the latter more rounding at apex, the base truncate medially, becoming strongly anteriorly oblique laterally, the ante-scutellar impression large and rounded though feebly; elytra at base a fourth wider, the suture two-fifths longer, than the prothorax; abdomen distinctly narrower than the elytra, very slightly narrowing, with just visibly arcuate sides, throughout, the fifth tergite barely longer than the fourth, the sixth (♂) with two moderate acute median teeth, separated by an even gentle sinus and mutually much more distant than either from the strong porrect lateral processes. Length 2.3 mm.; width 0.65 mm. California (Riverside).

In coloration this species resembles *fenyesi* Bernh., as well as several others, but it differs in its much longer third antennal joint and smaller prothorax among other characters—such as the unequally spaced teeth of the sixth male tergite in *immerita*. The two long oblique corneous processes of the male genitalia project between the upper and lower plates of the sixth segment in the type.

Dimetrota incredula n. sp.—Somewhat as in the preceding in form, coloration and sculpture, the head and abdomen however deep black, the prothorax piceous-black and without bronzy glimmer, the elytra pale piceo-flavate, scarcely at all infumate at the scutellum, the legs very pale, with the femora in great part blackish; head slightly wider than long, two-thirds as wide as the prothorax, the eyes moderately prominent, at less than their own length from the base, the tempora not more prominent,

the carinæ entire; antennæ piceous-black throughout, moderately long, notably thick but not much increasing from the third joint to the tip, the third scarcely at all longer than the second, very strongly and evenly obconic, fourth very slightly longer than wide, fifth fully as long as wide, six, seven and ten but slightly, the eighth and ninth shorter and more strongly, transverse, the last fully as long as the two preceding; prothorax moderate, nearly one-half wider than long, parallel and strongly, subevenly rounded at the sides, the median line very obsoletely impressed, enlarging sensibly at base; elytra at base fully a sixth wider, the suture two-fifths longer, than the prothorax; abdomen evidently narrower than the elytra, just visibly tapering and with straight sides throughout, the fourth and fifth tergites equal, the sixth (♂) with two short subtuberculose median teeth, which are mutually a little more approximate than either from the lateral processes, the latter moderate. Length 2.8 mm.; width 0.75 mm. California (Saucelito, Marin Co.).

Recognizable at once by the antennal structure, the tenth joint being notably longer than the eighth or ninth.

Dimetrota opinata n. sp.—Coloration and sculpture nearly as in the preceding, except that the legs are pale brown throughout; head smaller, but little wider than long, three-fifths as wide as the prothorax, the eyes slightly prominent, at about their own length from the base, the tempora equally prominent, straight for some distance, the carinæ entire; antennæ moderately long, piceous-black throughout, rather slender basally, very gradually and evenly incrassate to the tip from about the third joint, which is obconic and just visibly longer than the second, fourth only as long as wide, similar to the fifth, sixth to ninth equal in length but increasing from nearly as long as wide to distinctly transverse, the tenth decidedly longer and less transverse, the last as long as the two preceding; prothorax as in the preceding throughout but a little shorter; elytra at base about a fifth wider, the suture two-fifths longer, than the prothorax; abdomen as in the preceding, except that the sixth tergite (♂) has the two median teeth at tip smaller though more acute and mutually separated by exactly the interval between each and the lateral processes, with the edge between them transverse and not sinuate as it is in *incredula*. Length 2.75 mm.; width 0.72 mm. California (Berkeley, Alameda Co.).

Differs from the preceding in its slightly smaller head and prothorax, more basally tapering antennæ and in the conformation of the apex of the sixth tergite in the male.

Dimetrota cerebrosa n. sp.—Black, the anterior parts alutaceous and feebly bronzed, the elytra pale, blackish about the scutellum, the abdomen strongly shining; sculpture as in the preceding, the asperate punctures small and dense, the abdomen sparsely punctulate posteriorly; head distinctly transverse, nearly three-fourths as wide as the prothorax, the eyes moderately convex, at nearly their own length from the base, the tempora straight and parallel, rounding basally, barely as prominent

as the eyes, the carinæ entire; antennæ black throughout, gradually and moderately thick and incrassate distally, moderately long, the third joint somewhat longer than the second, fourth and fifth a little longer than wide, sixth to tenth equal in length, passing from as long as wide to a third wider than long, the ninth and tenth mutually similar, the last not quite as long as the two preceding; prothorax scarcely two-fifths wider than long, parallel, with feebly, evenly arcuate sides, the median line very obsoletely impressed, somewhat more broadly basally to the feeble and rounded basal impression; elytra relatively a little more transverse and with somewhat more diverging sides than in the preceding, at base about a sixth wider, the suture fully a third longer, than the prothorax; abdomen much narrower than the elytra, distinctly narrowing and with nearly straight sides from the apex of the first tergite though the fifth, which at apex is only about three-fourths as wide as the first, a little longer than the fourth, the sixth (♂) with the two median teeth at the apex rather long, acute and upturned, separated by a fourth more than either from the acute lateral processes. Length 2.8 mm.; width 0.78 mm. California (Saucelito, Marin Co.).

Readily separable from the preceding by the mutually similar two penultimate antennal joints, by the larger head, less rounded sides of the prothorax, still more tapering apical part of the abdomen and other differences. A female example from Monterey does not seem to differ specifically.

All the species of *Dimetrota* here defined may fall in immediately after *resima*, of my previous paper.

Subgenus **Engamota** Csy.

Reexamination of this subgenus under better light, shows that the hypomera are horizontal and slightly warped and that it should be attached provisionally to *Dimetrota* as a subgenus, instead of to *Acrotona* as originally proposed by the writer. Both this subgenus and *Dimetrotina* will come in before *Dalotia* Csy., which has more the aspect of a genus than a subgenus, the sexual characters of the male being of a type unknown in *Dimetrota*, and the sternal features also being exceptional in this part of the Athetid series.

Subgenus **Dimetrotina** nov.

This name is here applied to a small species, having the horizontal hypomera of *Dimetrota* but with a different habitus of the body and with much shorter antennæ. The infra-lateral cephalic carinæ are strong and entire, the middle coxæ well separated, the mesosternal process extending slightly beyond their middle, not

finely aciculate but rather obtusely pointed at the very free tip, which is moderately distant from the broadly angulate metasternum, the longitudinal separating ridge not much depressed and broadly, feebly convex; the first four joints of the hind tarsi are equal, the fifth as long as the preceding three combined.

Dimetrota (**Dimetrotina**) **vaniuscula** n. sp.—Oblong, feebly convex, strongly shining, the micro-reticulation feeble, large and polygonal on the abdomen; punctures small but asperate, only moderately close, denser on the elytra, rather numerous but very fine on the abdomen; vestiture moderately short, palish; color piceous-black, the head and abdomen black, the elytra dark piceous, pallescent at the humeri, the legs pale, short; head slightly transverse, fully three-fifths as wide as the prothorax, convex, the eyes rather large and prominent, at three-fourths their length from the base, the tempora less prominent, gradually arcuate and converging to the base; antennæ moderately short, black, pale basally, gradually and distinctly incrassate from the fifth joint, the third joint but very little shorter than the second, both much shorter than the first, which is suboval, fourth slightly wider than long, scarcely at all wider than the tip of the third, fifth abruptly wider and transverse, the tenth two-thirds or more wider than long, the last large, conoidal, longer than the two preceding; prothorax broad and short, three-fifths wider than long, widest slightly behind the middle, the sides rounded, more convergent anteriorly than basally, the surface unimpressed; elytra moderately transverse, with feebly diverging sides, at base equal in width to the prothorax, the suture two-fifths longer, the apices not sinuate externally; abdomen rather small, much narrower than the elytra, very feebly narrowed and with not quite straight sides from base through the fifth tergite, which is scarcely at all longer than the fourth, the sixth in the type with the apex rather deeply but broadly, angularly sinuate, the lateral angles obtuse and slightly blunt, not modified. Length 1.75 mm.; width 0.63 mm. Nevada (Esmeralda Co.),—Nunenmacher.

Distinguishable in the present group by the wide prothorax, fully equaling the base of the elytra and widest behind the middle. The sex of the type cannot be stated with certitude but it is probably male.

Sableta Csy.

The species described by the writer under the name *Silusida nanella* and assigned to the Bolitocharini (Tr. St. Louis, XVI, p. 271), is a Myrmedoniid and is identical with *Sableta* (*Canastota*) *beatella* (Mem. Col., I, p. 109); the name of the species will therefore be *Sableta* (*Canastota*) *nanella* Csy., with the name *beatula* as a synonym. *Silusida marginella* is a true Bolitocharid near *Venusa*.

Subgenus **Fusalia** nov.

In this subgenus the body is large and obscurely colored, with short antennæ, having the outer part very thick and fusiform, the hypomera horizontal and feebly warped. The middle coxæ are rather widely separated, the moderately short mesosternal process wide and circularly rounded, scarcely free and separated from the long flat and apically truncate metasternal projection by a very short undepressed interval, not half as long as the apical width of the metasternum. The type is as follows:

Sableta (Fusalia) brittoni n. sp.—Somewhat stout and convex, subfusoid, slightly shining and with fine, rather close, more or less asperate punctures, the abdomen strongly shining, with the micro-reticulation in extremely fine feeble and close-set wavy transverse lines and also with fine sparse and non-asperate punctures; color piceous, the elytra paler, broadly blackish toward the base medially and postero-externally, the abdomen black, the apices of the basal segments pale, the legs very pale; pubescence moderate, close and distinct; head wider than long, two-thirds as wide as the prothorax, the eyes large, prominent, at less than half their length from the base, the tempora very rapidly converging to the base, the carinæ fine, not quite entire; antennæ thick, blackish, the first four joints rather slender, pale, the first much longer than the second, which is equal to the third, fourth but little thicker, much wider than long, five and following abruptly thicker, the seventh widest and more than twice as wide as long, thence narrowing slightly, the last longer than the two preceding; prothorax two-thirds wider than long, rounded at base, the sides rounding and moderately converging anteriorly, becoming subparallel and nearly straight behind about the middle, unimpressed; elytra rather short and transverse, with strongly diverging sides, at base equal in width to the prothorax, the suture about a fifth longer, the apices not sinuate; abdomen much narrower than the elytra, parallel basally, gradually and feebly tapering posteriorly, the fourth and fifth tergites subequal, the third impression not so deep as the two basal; hind tarsi moderate, the first two joints short and equal, two to four increasing in length, the fifth as long as the two preceding combined. Length 3.3 mm.; width 0.75 mm. Connecticut (Westville),—W. E. Britton.

The antennæ, large eyes and peculiar sternal structure will permit instant recognition of this distinct species, which is probably fungivorous. It in reality represents more nearly a distinct genus than a subgenus, as shown by the sternal structure and general habitus.

Nosora n. gen.

The general outline of the body in this genus is somewhat stout and subparallel, recalling to some extent the larger forms of *Pancota*

(*Dolosota*), but with the elytra large and well developed, their flanks extending posteriorly a little further than the sublateral parts of the apices, the latter therefore feebly flexed posteriorly at the sides though not properly sinuate; the first three tergites are strongly impressed and are much shorter than either the fourth or fifth, the latter being well developed and always more closely asperate than those more anterior. The eyes are very large, the infra-lateral carinæ distinct and the antennæ small and strongly incrassate, the middle coxæ contiguous, the mesosternal process moderately short and acute, the metasternum transverse behind the coxæ and the sunken longitudinal ridge very acute. The hypomera are horizontal and feebly warped as in *Dimetrota*. The following may be regarded as the type:

Nosora azteca n. sp.—Rather convex, very strongly shining throughout, black, the elytra not paler, the abdominal apex slightly pale, the legs slender, very pale; punctures fine and rather sparse throughout except on the fifth and sixth tergites, where they become close and strongly asperate, also slightly asperate on the other tergites except in the very smooth basal regions; pubescence short, decumbent, dusky and inconspicuous; head wider than long, two-thirds as wide as the prothorax, the eyes very large and prominent, the tempora less than half as long and rapidly converging to the base, the carinæ entire; antennæ very short, piceous, the four basal joints pale, the first but little longer than the second, third still a little shorter, obconic, the fourth scarcely thicker, slightly transverse, five and following somewhat abruptly wider and increasing rapidly in width, all strongly transverse, the tenth more than twice as wide as long, the last ogival and longer than the two preceding; prothorax short, slightly less than twice as wide as long, widest near the broadly and strongly rounded base, the sides thence slightly converging and strongly rounded to the apex, unimpressed; elytra slightly transverse, with feebly diverging sides, at base just visibly wider, the suture about two-fifths longer, than the prothorax; abdomen parallel, with straight sides, distinctly narrower than the elytra; tarsi moderate, the first four joints of the posterior equal. Length 1.6–2.0 mm.; width 0.38–0.5 mm. Mexico (Cuernavaca),—Wickham.

To be known at once by its shining black integuments, very short antennæ, large eyes and short transverse prothorax. The following differs greatly in color but is similar in all of its structural characters, except that the metasternum behind the coxæ, instead of being perfectly even and transverse, has a feeble median arcuation:

Nosora meticola n. sp.—Form, lustre and sculpture nearly as in the preceding but rather less convex, the abdomen also with finer and less

asperate punctures throughout, though having the same large polygonal micro-reticulation, the fifth and sixth tergites with similar close asperities; color very pale flavo-testaceous, the head scarcely at all darker, the abdomen with a black subapical cloud, the elytra rather more obscure than either the pronotum or basal part of the abdomen; head, eyes, carinæ and antennæ almost as in *azteca*, except that the antennæ are not quite so short, the part beyond the fourth joint less thick, more slowly increasing and less abruptly dusky in color; prothorax still shorter, fully twice as wide as long, otherwise nearly similar though not quite so convex; elytra relatively even better developed, slightly transverse, with feebly diverging sides, at base barely at all wider than the prothorax, the suture nearly three-fifths longer; abdomen evidently though not greatly narrower than the elytra, with straight sides, parallel or perhaps with the apex of the large fifth tergite even a little wider than the first. Length 1.7 mm.; width 0.4 mm. Arizona (Nogales),—Wickham.

The strikingly different coloration will distinguish this species from *azteca*, though in structural characters they are virtually identical. Sexual characters are not apparent.

Rhodeota n. gen.

Examining *Ousipalia tartarea*, of my previous paper, under more satisfactory conditions, reveals the fact that the hypomera are horizontal and warped as in *Dimetrota*, to which series it really belongs. It is very distinct, however, in having no infra-lateral cephalic carinæ. The eyes are rather coarsely faceted, the basal angles of the prothorax rounded, the elytral flanks feebly prominent posteriorly at apex, the apices however not sinuate, and the abdominal impressions are nearly as in *Dimetrota*. The middle coxæ are well separated, the mesosternum coming gradually to a very acute and extremely free point slightly behind their middle, but not at all prolonged and separated from the transverse and feebly arcuate metasternum by a long and unusually depressed interval. The four basal joints of the hind tarsi are subequal. The large head and broad abdomen give the type named above somewhat the appearance of an *Ousipalia*, but it evidently represents a distinct Athetid genus of the *Dimetrota* series.

Pseudota Csy.

A genus containing many inconsistencies of structure and facies, but distinguished as a group of species by the characters already given it. From the subgenus *Dimetrotina* of *Dimetrota*, which

might possibly be included within its limits, all of its various elements differ in the form and size of the prothorax, giving a notably different habitus. The species of *Pseudota* are extremely numerous and only a moderate proportion of them were described in my previous paper. The following species have come to light from time to time amongst the unstudied material of my collection:

Pseudota puricula n. sp.—Feebly convex, rather shining, finely, closely, asperately punctate, more densely on the elytra, finely and very remotely on the polished abdomen, except basally, the micro-reticulation there rather large but feeble and irregular; color rufo-piceous, the head and a very large subapical abdominal cloud black, the elytra pale brownish-flavate, feebly infumate at the scutellum and postero-externally, the legs very pale; pubescence very short, not conspicuous; head wider than long, nearly three-fourths as wide as the prothorax, the eyes large, at barely two-thirds their length from the base, the tempora slightly less prominent, at first straight and parallel, then strongly oblique to the base, the carinæ very fine, entire; antennæ pale piceous, still paler basally, rather short, gradually and distinctly incrassate, the second and third joints moderately long, subequal, the third much the more strongly narrowed basally, fourth slightly wider than long, fifth to ninth equal in length, gradually more transverse, the ninth nearly one-half wider than long, just visibly shorter than the tenth, the last pointed, as long as the two preceding; prothorax moderate, three-fifths wider than long, parallel, with evidently and subevenly rounded sides, the median line feebly, not finely impressed, ending in a small feeble impression at base; elytra at base fully a fifth wider, the suture two-fifths longer, than the prothorax; abdomen narrower than the elytra, parallel, the sixth tergite (♂) truncate, feebly sinuate in about median half and with a distinct and strongly concave, rounded but not posteriorly prominent auricle at each side. Length 2.4 mm.; width 0.53 mm. New York (Catskill Mts.).

Distinguishable by its pallid coloration, large eyes and antennal structure. From true Athetæ of the *nympha* class, which have almost similar antennæ and coloration, it may be known at once by the smaller and shorter prothorax, impressed along the median line, as well as by the wholly different type of male sexual characters, and, from those of the *gnoma* type, having almost similar coloration and somewhat similar male sexual characters, it departs very radically in the smaller impressed prothorax, giving a different facies.

Pseudota fascinans n. sp.—More slender and still more depressed, dull in lustre, the punctures fine, strongly asperate and dense throughout, fine and very close-set on all the tergites except the fifth, where they become sparse, with the surface shining, the latter gradually more opaque

to the base, the vestiture close, very short; color of the head blackish-piceous, of the prothorax very pale brownish-testaceous, of the elytra still paler brownish-flavate, scarcely visibly infumate at the scutellum, of the abdomen very pale reddish-flavate, with a large black subapical cloud, the legs very pale; head short and transverse, three-fourths as wide as the prothorax, the eyes large and very prominent, at one-half their length from the base, the tempora much less prominent, converging and evenly arcuate from the eyes to the base, the carinæ fine but entire; antennæ pale flavate throughout, short, the second and third joints subequal in length, fourth slightly wider than long, not much wider than the apex of the third, five to the tip abruptly much wider, stout and subequal in thickness, the ninth and tenth mutually similar, fully twice as wide as long, the last large, much longer than the two preceding, pointed; prothorax rather small and short, three-fourths wider than long, parallel and strongly, evenly rounded at the sides, the median line distinctly impressed throughout the length; elytra at base fully a fifth wider, the suture two-fifths longer, than the prothorax; abdomen slender, much narrower than the elytra, parallel, narrowing just visibly toward tip, the fifth tergite scarcely so long as the fourth, the sixth (♀) broadly rounded at tip, becoming feebly sinuate medially. Length 2.0 mm.; width 0.42 mm. New York (Catskill Mts.).

Quite distinct from the preceding in its smaller size and more slender outline, in the form of the head and tempora, in the paler and parallel-sided outer part of the antennæ, this being gradually incrassate distally in *puricula*, in its still shorter prothorax, in its denser punctuation throughout and subdepressed upper surface.

Pseudota nugatoria n. sp.—Rather stout, moderately convex, shining, piceous, the head and abdomen black, the latter slightly pale basally and at apex, with the reticulation large and polygonal; elytra rather pale brownish-flavate, feebly infumate at the scutellum and external apical angles, the legs very pale; pubescence pale, not very short and somewhat coarse; head convex, but little wider than long, rather more than three-fourths as wide as the prothorax, the eyes prominent, at distinctly less than their own length from the base; antennæ blackish-piceous with the first two joints pale, rather thick, moderately short, only very gradually incrassate, the second joint much shorter than the first and evidently longer than the more obconic third, which is only about one-half longer than wide, fourth slightly transverse, the outer joints short, the ninth not quite twice as wide as long, very slightly shorter than the tenth, the last ogivally pointed, distinctly longer than the two preceding; prothorax about one-half wider than long, parallel and rounded at the sides, wholly unimpressed; elytra at base about a sixth wider, the suture nearly one-half longer, than the prothorax; abdomen evidently narrower than the elytra, parallel basally, arcuately and distinctly narrowing apically, the fifth tergite equal to the fourth, the sixth in the type feebly sinuato-truncate and even at tip, the side angles slightly more than right and apparently unmodified, the sixth ventral evenly semicircular. Length 1.5 mm.; width 0.4 mm. Pennsylvania (near Philadelphia).

Differs from *dissensa*, which occurs in the same locality, in its larger head, very much less apically incrassate antennæ, with far less unequal ninth and tenth joints and in the narrower, still more apically narrowed abdomen; in coloration, in the rather loose feeble punctuation and coarse vestiture the two are, however, rather similar.

Pseudota clienta n. sp.—Parallel, moderately convex, shining; head dark, the prothorax paler, rufo-piceous, the elytra still paler and brownish-flavate, broadly blackish about the scutellum, the abdomen black, palish at apex, the legs very pale; punctures fine and feeble though close, sparser on the head and sparser, though numerous, on the more polished abdomen, the vestiture very short, fine and inconspicuous; head rather transverse, barely two-thirds as wide as the prothorax, the eyes at two-thirds their length from the base, the tempora not quite so prominent, parallel and nearly straight, gradually rounding to the base, the carinæ fine, entire; antennæ blackish, moderately short, thick, slender and testaceous basally, the second and third joints long and equal, fourth broader, rather transverse, five to ten subsimilar though gradually increasing, short, about two-thirds wider than long, the last ogival, a little longer than the two preceding; prothorax well developed, one-half wider than long, parallel and evenly, distinctly rounded at the sides, the median line very finely and faintly impressed and with a rounded shallow ante-scutellar impression; elytra rather short and transverse, with slightly diverging and nearly straight sides, at base equal in width to the prothorax, the suture only about a fifth longer than the latter; abdomen distinctly narrower than the elytra, perfectly parallel, with almost straight sides, the fifth tergite but little longer than the fourth, the first three impressed at base as usual. Length 2.2 mm.; width 0.48 mm. Mississippi (Vicksburg).

Distinguishable from any of the other eastern species by the relatively larger prothorax and noticeably short elytra. The middle coxæ are rather widely separated, the mesosternal process long, gradually acute but not at all aciculate or prolonged, the metasternal projection very short and broadly, obtusely angulate, the longitudinal ridge not much sunken and broadly, feebly convex transversely.

Pseudota vana n. sp.—Moderately stout, feebly convex, rather dull in lustre, the punctures very close throughout and unusually strongly asperate, numerous but smaller on the more shining abdomen, becoming gradually sparse posteriorly, the pubescence short; color piceous-black, the head and abdomen deep black, the legs nearly black, short; head transverse, more than three-fourths as wide as the prothorax, the eyes prominent, at two-thirds their length from the base, the less prominent tempora converging and arcuate to the base, the carinæ fine, subentire;

antennæ not very short, extending to the middle of the elytra, deep black, picescent basally, only very gradually and feebly incrassate, the third joint moderately elongate, nearly as long as the second, fourth scarcely wider than long or wider than the tip of the third, fifth abruptly much wider, transverse, the ninth and tenth mutually similar and about two-thirds wider than long, the last large, longer than the two preceding; prothorax more than one-half wider than long, parallel, the sides evenly and very strongly rounded, the median line finely, feebly impressed basally; elytra at base scarcely visibly wider, the suture about one-half longer, than the prothorax; abdomen much narrower than the elytra, parallel, narrowing very slightly at apex, the fifth tergite short and transverse, equal to the fourth but almost impunctate. Length 1.4 mm.; width 0.45 mm. Queen Charlotte Islands (Massett),—Keen.

Distinguishable at first glance from *nescia*, the only other described species of the islands, in its darker coloration, larger and transverse head, longer, darker and much less thick antennæ, with less transverse joints and much longer eleventh joint, and in its very much broader, more laterally rounded prothorax; there is, in fact no close resemblance whatever between the two species.

Pseudota cornicula n. sp.—Stout, very much depressed, feebly shining, deep black throughout, the legs short, slender, black, slightly paler distally; punctures fine, dense and asperate throughout; on the abdomen they are smaller but asperate, close-set and almost equally so to the tip; pubescence dark but distinct; head slightly wider than long, about three-fourths as wide as the prothorax, the eyes prominent, at barely two-thirds their length from the base, the less prominent tempora parallel and straight near the eyes; antennæ rather short, gradually and moderately incrassate, deep black throughout, the second joint as long as the first, third evidently shorter, fourth but little wider than long, fifth slightly wider and a little more transverse, fifth to tenth mutually subsimilar but gradually increasing, the latter moderately transverse, the last rather short and obtuse; prothorax very short and broad, nearly four-fifths wider than long, parallel and strongly rounded at the sides, scarcely at all impressed; elytra large, but slightly shorter than wide, with distinctly diverging and straight sides, at base barely visibly wider, the suture fully three-fourths longer, than the prothorax; abdomen much narrower than the prothorax, perfectly parallel, the sides evenly though barely perceptibly arcuate, the tergites short and transverse, equal, except the fifth which is a third longer than the fourth, the first alone very distinctly, and that narrowly, impressed at base. Length 1.65 mm.; width 0.56 mm. British Columbia (Metlakatla),—Keen.

Sexual characters are not apparent; the sixth tergite in the type is very broad and arcuate at tip. This species is very isolated but apparently belongs in *Pseudota;* the single type is in such condition that I cannot examine the tarsi.

Pseudota nanulina n. sp.—Very small, not stout, moderately convex and shining, the punctures fine, close-set and strongly asperate throughout anteriorly, feeble and sparser on the abdomen; color deep black throughout, the elytra barely at all picescent, the legs nearly black; pubescence inconspicuous; head slightly wider than long, fully three-fourths as wide as the prothorax, the front with a small deep rounded impression at the centre; eyes prominent, at three-fourths their length from the base, the less prominent tempora rounding to the base, the carinæ fine, entire; antennæ rather short, black, feebly incrassate, the second joint nearly as long as the first, the third shorter, fourth slightly, the outer joints moderately, transverse, the last pointed, as long as the two preceding; prothorax nearly one-half wider than long, much rounded at base and with obtuse and rounded angles, the sides parallel and very moderately rounded, the surface with a small and very feeble rounded ante-scutellar impression; elytra moderate, at base about a sixth wider, the suture two-fifths longer, than the prothorax; abdomen much narrower than the elytra, gradually feebly tapering, with nearly straight sides, from base to apex, the fifth tergite a little longer than the fourth. Length 1.28 mm.; width 0.37 mm. British Columbia (Metlakatla),—Keen.

Wholly different from the preceding but forming, with *vana* and the following, a small natural group of the genus, characterized by the small size, deep black coloration, strongly asperate punctures and other features; it differs from *vana* in its smaller size, much more slender form, relatively larger head and narrower prothorax and in many other ways.

Pseudota formalis n. sp.—Similar to the preceding in general form and size and also in its deep black coloration, but more shining, with the punctures much finer, less asperate and mutually twice as distant, the head, eyes and antennæ almost similar, the front however without a central foveiform impression though with the median line very feebly, somewhat broadly impressed from the middle to the base; prothorax similar in general form but not evidently impressed and smaller in size, less greatly though evidently exceeding the head in width; elytra larger, at base fully a fourth wider, the suture three-fifths longer, than the prothorax; abdomen longer, much narrower than the elytra, perfectly parallel, with just visibly and evenly arcuate sides, the fifth tergite obviously longer than the fourth, the first three each with a distinct transverse impression at base. Length 1.4 mm.; width 0.4 mm. British Columbia (Metlakatla).—Keen.

The smaller, sparser punctures, smaller prothorax and larger elytra obviously differentiate this species from the preceding.

Hilarina Csy.

This subgenus of *Datomicra* has possibly been confounded with *Meotica* hitherto, but it differs completely in the form of the head and eyes and includes some of the smallest known species of the Athetæ; the following has recently been received from Dr. W. E. Britton:

Datomicra (Hilarina) mina n. sp.—Strongly shining, moderately convex, brownish-testaceous, the head piceous, the abdomen black though gradually dark reddish basally and at apex; punctures extremely fine, sparse and indistinct, very sparse on the elytra, the vestiture moderately long, stiff and sparse, pale, the legs pale; head large, but little wider than long, fully four-fifths as wide as the prothorax, the eyes very prominent, at about their own length from the base, the tempora less prominent, subparallel and feebly arcuate to the base, the carinæ fine, not quite entire; antennæ pale, very short and stout, the first joint almost as long as the next two, the third shorter than the second, obconic, less than one-half longer than wide, four and following transverse, increasing, subsimilar, the outer joints very short, more than twice as wide as long, the last obtuse, fully as long as the two preceding; prothorax not quite twice as wide as long, much wider near the apex than at base, the sides strongly rounding anteriorly, converging and nearly straight basally; elytra about a fifth or sixth wider and two-fifths longer than the prothorax; abdomen much narrower than the elytra, parallel, with feebly and evenly arcuate sides, the fifth tergite not quite so long as the fourth. Length 1.1 mm.; width 0.22 mm. Connecticut (Double Beach),—Viereck. In fungi.

Differs from both *particula* and *inanis* in its much more prominent eyes, and, from the former, also in its still more converging sides of the prothorax basally; in the latter the sides of the prothorax are parallel and evenly rounded, this being a more slender and parallel species than either *particula* or *mina*.

The following was overlooked in my previous revision of the genus and is much smaller in size:

Datomicra (Hilarina) atomica n. sp.—Slender, moderately convex, shining, pale luteo-flavate, the abdomen black posteriorly, the head blackish, the elytra a little darker than the prothorax or basal part of the abdomen, the legs pale; punctures fine, not close and rather obscure; pubescence rather long and coarse but not close; head but little wider than long, subquadrate, five-sixths as wide as the prothorax, the front broadly concave anteriorly, the eyes large and very prominent, at three-fourths their length from the base, the tempora less prominent, parallel, rounding at base, the carinæ wholly wanting; antennæ short, stout, strongly incrassate, pale in color and with stiff bristling setæ, the first joint almost as long as the next two, the third with a slender parallel

peduncle in almost basal half, fourth distinctly, the outer joints strongly, transverse, the tenth just visibly longer than the ninth, twice as wide as long, the last stout, obtuse, fully as long as the two preceding; prothorax three-fifths wider than long, parallel, with feebly rounded sides, the median line feebly and indefinitely impressed; elytra well developed, with slightly diverging sides, slightly shorter than wide, at base perceptibly wider, the suture two-fifths longer, than the prothorax, the apices obliquely truncate; abdomen distinctly narrower than the elytra, parallel, with feebly arcuate sides, the fourth and fifth tergites subequal in length, the impressions of the first three deep and nearly equal. Length 0.9 mm.; width 0.2 mm. New York (Catskill Mts.).

This is the smallest Myrmedoniid species known to me; there are some Bolitocharids and Oligotids smaller, but otherwise it is the smallest Aleocharinid in my collection. *Inanis* is published as having a width of body of 0.2 mm., but renewed measurement, under better conditions, shows that it is fully 0.23 or 0.24 mm. The difference in size of *atomica* and *inanis* is greater on actual comparison than can be realized from these stated dimensions.

Pancota Csy.

Dolosota Csy.

The genus *Pancota*, described as a Bolitocharid (Tr. St. Louis, XVI, p. 345), proves to be Myrmedoniid and is identical with the genus named *Dolosota* by the writer (Mem. Col., I, p. 136); the name *Dolosota* will have to be replaced therefore by *Pancota*. The type, *Pancota collaris* Csy., differs from any other in having no black abdominal coloration and in its slightly more sensibly incrassate antennæ; it belongs to the second division, the head having very large shallow umbilicate punctures. The numerous species of *Pancota* are in many cases closely allied among themselves, but the very large series of a number of them in my cabinet seem to show decided differences upon close observation; the following was included with the type of *cupiens* in my revision of *Dolosota*, but is different:

Pancota lætabilis n. sp.—Moderately stout and convex, slightly shining, the abdomen more so and with the micro-reticulation rather large and very irregular; punctures rather strong, moderate and not asperate on the head and pronotum, close and asperate on the elytra, rather close and strongly asperate throughout the abdomen; color pale ochreo-flavate, the prothorax reddish, the elytra more yellowish, the head piceous-black, the fourth tergite wholly black; pubescence short, coarse,

pale in color; head much wider than long, three-fifths as wide as the prothorax, the eyes rather prominent, at three-fifths their own length from the base, the carinæ fine, entire; antennæ pale ochreo-flavate throughout, rather short and slender, gradually very feebly incrassate, the first three joints diminishing regularly and moderately in length, the third very evenly obconical and slender, not in the least constricted basally, four to six a little longer than wide, tenth slightly wider than long, the last as long as the two preceding; prothorax widest just behind the middle, fully three-fourths wider than long, the sides strongly and subevenly rounded, somewhat more converging anteriorly than posteriorly, wholly unimpressed; elytra moderately transverse, with slightly diverging, feebly and evenly arcuate sides, at apex as wide as the prothorax, at base slightly narrower, the suture fully a fourth longer, the apices rather deeply sinuate laterally; abdomen at base only very slightly narrower than the elytra, evenly and feebly tapering, with nearly straight sides throughout, the fifth tergite equal in length to the fourth and four-fifths as wide as the first. Length 1.8 mm.; width 0.45 mm. New York (Catskill Mts.).

Differs from *cupiens* principally in its more parallel and less fusoid form, larger head, much less strongly tapering abdomen and in its paler coloration, with the large and more diffused black cloud of *cupiens* virtually confined to the fourth tergite.

Colpodota Rey.

The following species has an exceptional form among the California species, but may be placed near *laxella* in the arrangement given in my previous paper:

Colpodota pupilla n. sp.—Rather stout and strongly fusoid, moderately convex, subalutaceous, finely, closely, asperulately punctate, the abdomen more shining and with the fine asperate punctures well spaced throughout; color dark piceous-brown, the elytra but just visibly paler, the legs pale brownish-flavate; pubescence rather short, abundant and distinct; head notably small, three-fifths as wide as the prothorax, a little wider than long, the eyes slightly prominent, at somewhat more than their own length from the base, the tempora slightly fuller than the eyes, broadly rounded, gradually more converging basally, the carinæ entire; antennæ rather heavy, blackish-piceous throughout, gradually and evidently incrassate, slightly longer than the head and prothorax, the first three joints equal in length, the first stoutest, four to ten of similar length, passing from as long as wide to a third wider than long, the last ogival, as long as the two preceding; prothorax one-half wider than long, widest basally, the sides thence strongly converging and broadly arcuate to the apex, which is two-thirds as wide as the base, the latter rounded, the angles subobliterated, the surface unimpressed; elytra transverse, with very feebly diverging sides, at base not quite as wide as the prothorax, the suture equal in length to the latter; abdomen at base distinctly

narrower than the elytra, thence strongly tapering, with just visibly arcuate sides, through the fifth tergite, which at apex is three-fifths as wide as the first, one-half longer than the fourth. Length 1.6 mm.; width 0.36 mm. California (Paraiso Hot Springs, Monterey Co.).

Distinguishable very readily by the strongly fusiform outline, anteriorly narrowed prothorax, rather heavy antennæ and other habital features.

Moluciba n. gen.

The species for which this generic name is proposed is of remarkably distinct appearance among the allies of *Acrotona*. The prothorax and elytra are both very greatly developed, the cephalic carinæ distinct and entire, the middle coxæ narrowly but clearly separated, the mesosternal process becoming very slender, greatly prolonged and aciculate almost to their posterior limits, where its very free tip is separated from the moderate triangular metasternal projection, which is almost as long as wide, with its apex narrowly rounded, by a very short interval as in *Coprothassa*, and, as in that genus, to which however there is absolutely no suggestion as to similarity in habitus, the elytral apices are rather deeply sinuate externally. The type may be described as follows:

Moluciba grandipennis n. sp.—Rather large and stout, but feebly convex, pale piceous-brown, the head and the abdomen, except the apex and the apices of the basal segments, blackish, the elytra not paler than the prothorax, feebly infumate along the suture basally and broadly postero-externally, the legs pale; head and pronotum shining, with fine and well separated, rounded and slightly elevated punctures, the elytra duller, with still finer and closer, feebly asperate punctures, the abdomen dull, with very fine close punctures throughout, as in many Oxypodæ; pubescence fine, very short and dense on the elytra and abdomen; head small, almost longer than wide, one-half as wide as the prothorax, the eyes but slightly prominent, at almost one-half more than their own length from the base, the tempora parallel and broadly rounded, a little more prominent than the eyes; antennæ blackish, gradually testaceous basally, rather long, slender basally, very gradually becoming notably thick at apex, the second joint fully as long as the first but thinner, only very little longer than the third, fourth sensibly longer than wide, four to ten very evenly increasing in width, fifth as long as wide, tenth two-fifths wider than long, the last pointed, rather longer than the two preceding; prothorax large, suborbicular, a third wider than long, the sides rounded, gradually strongly converging anteriorly, widest behind the middle, the base rounded, with the angles obtuse and blunt, the surface with a large shallow rounded ante-scutellar impression; elytra very large, as long as wide, but little wider just before the apex than at base,

the sides feebly rounded posteriorly, at base very little wider, the suture a third longer, than the prothorax; abdomen at base much narrower than the elytra, the sides thence evidently converging and nearly straight through the fifth tergite, which is fully one-half longer than the fourth, the first three impressed transversely at base. Length 3.0 mm.; width 0.8 mm. British Columbia (Metlakatla),—Keen.

This species is wholly isolated and I know nothing else that in the least recalls it; no sexual marks can be discerned in the single type which has lost both hind legs.

Sipalia Rey.

The species of this genus have a facies suggestive of certain Bolitocharids, to the company of which it was assigned by Rey, who associated with it as subgenera certain groups named *Pasilia* and *Pisalia*, which as it happens are true Bolitocharids. The present writer also fell into the same error, applying the name *Sibiota* (Tr. St. Louis, XVI, p. 350) to an assumed Bolitocharid which proves, upon observation under better conditions, to be a Myrmedoniid, a subgenus of *Sipalia* Rey, and allied to the *circellaris* group. With the type of *Sibiota*, named *impressula* Csy., is to be associated the species recently described (Mem. Col., I, p. 167) under the name *Sipalia fossata* Csy. *Sipalia lineatula* Csy., (l. c.) will form another group or subgenus, with which the following species may be associated:

Sipalia fontana n. sp.—Moderately slender and convex, parallel, somewhat shining, the abdomen polished; color pale testaceous, the head piceous-black, the elytra feebly clouded and abdomen with a large black subapical area, the legs pale; punctures of the pronotum fine and close, asperulate, of the elytra notably large, less close and very strongly asperate, of the abdomen fine, sparse and asperulate; on the head they are coarse and very shallow, rather close but not asperate and not divided along the median line at least posteriorly; pubescence rather short, pale and coarse; head rather transverse, barely three-fourths as wide as the prothorax, the eyes small, having (♂) about 26 or 27 coarse facets, the tempora slightly more laterally prominent and much longer than the eyes, arcuate and gradually converging to the base, the carinæ strong and entire; antennæ rather short, gradually and moderately incrassate, pale, feebly infumate except basally and at apex, the third joint slightly shorter though similar to the second, which is evidently shorter than the first, fourth nearly as long as wide, thence gradually more transverse, the outer joints nearly twice as wide as long, the last ogival, rather longer than the two preceding; prothorax three-fifths wider than long, parallel,

evenly and rather strongly arcuate at the sides, the basal angles obtuse, the median line feebly impressed basally and with a very feeble and transversely oval ante-scutellar impression; elytra nearly parallel, moderately transverse, at base not quite so wide as the middle of the prothorax, the suture equal in length to the latter, the apices sinuate laterally, the flanks extending posteriorly somewhat; abdomen parallel, with nearly straight sides, as wide as the elytra, the fifth tergite (♂) barely as long as the fourth and with a very minute tubercle on the median line behind the centre, the sixth broadly rounded, becoming feebly sinuate medially at tip, the edge very minutely serrulate; middle coxæ narrowly separated, the acute apex of the mesosternal process extending behind their middle and very free, far above (viewed ventrally) the surface of the large and acutely defined angulate metasternal projection and separated therefrom by a rather short interval; hypomera moderately inflexed, wholly visible from the sides; tarsi moderately short and slender, the first four joints of the posterior subequal, the first very slightly longest. Length 1.65 mm.; width 0.38 mm. Pennsylvania (Buena Vista Spring, Franklin Co.). Under leaves of the forest in August of a very dry season.

Differs from *lineatula* very markedly in the coarsely asperate sculpture of the elytra, somewhat smaller and less incrassate antennæ, much shorter, more transverse head and in many other features; in fact it is not at all closely allied to *lineatula* though assignable apparently to the same group of *Sipalia*.

The following is here suggested as another subgenus of *Sipalia*, though it may prove to have rather generic than subgeneric value:

Subgenus **Sonomota** nov.

Differs from *Sipalia* in its more developed elytra, shorter and evenly obconic but more slender third antennal joint and in having the metasternal projection between the middle coxæ rather long, convex and undefined by a fine beaded edge, the middle acetabula being gradually formed and not sharply defined; the following is the type and only known species:

Sipalia (Sonomota) lippa n. sp.—Parallel, rather convex, strongly shining, testaceous, the head scarcely darker, the abdomen clouded gradually with blackish posteriorly except at apex, the legs pale; punctures fine, rather sparse, asperulate and moderately numerous on the abdomen, where the micro-reticulation is notably large and polygonal but not strong; pubescence moderately long, rather sparse; head slightly wider than long, fully four-fifths as wide as the prothorax, gradually and moderately swollen basally, the eyes slightly prominent, at about twice their length from the base, obliquely elliptic, their facets separated

posteriorly, the carinæ wholly obsolete; antennæ pale, rather short, the second joint only slightly shorter than the first and fully one-half longer than the third, fourth nearly as long as wide, fourth and following to the tip evenly and rather rapidly wider, becoming notably thick, the tenth joint twice as wide as long, the last very obtuse, as long as the two preceding; prothorax not quite one-half wider than long, parallel, with evenly and feebly rounded sides and a small rounded ante-scutellar impression; elytra rather transverse, with slightly diverging sides, at base equal in width to the prothorax, the suture about as long as the latter, the apices not sinuate; abdomen parallel, fully as wide as the widest part of the elytra, the first two basal impressions fine and moderate, the third obsolete, the fifth tergite much longer than the fourth. Length 1.6 mm.; width 0.26 mm. California (San Francisco).

To be known by its small size, parallel form, well developed elytra and unusually long fifth tergite for the Sipaliids.

The following is still another subgenus probably of the *Sipalia* series:

Subgenus **Sipaliella** nov.

The body is here minute, perfectly parallel, with the head oval and enlarged basally, the eyes very small and anterior, the carinæ wholly wanting, the elytra moderately short, the fifth tergite very large and not moderate or shorter than the fourth as in *Sipalia*. I cannot be certain of the structure of the middle tarsi in my single example and assign the species to the neighborhood of *Sipalia*, more on general facies than any other consideration; the hypomera are similar.

Sipalia (Sipaliella) filaria n. sp.—Very slender, parallel, rather strongly shining, moderately convex, compact, pale testaceous, the head scarcely darker, the abdomen uniform in color; punctures fine, rather close-set, the micro-reticulation of the abdomen large and polygonal; pubescence short but erect and rather stiff; head slightly wider than long, subtriangular, with rounded sides, fully four-fifths as wide as the prothorax, the eyes minute, anterior, flat, composed of about ten rather coarse facets; antennæ short, pale, the second joint much shorter than the first and longer than the third, the latter only a third longer than wide and not thinner, fourth strongly transverse, fourth to the tip rapidly and uniformly becoming very thick, the tenth joint more than twice as wide as long, the last very stout, obtuse, much longer than the two preceding; prothorax a third wider than long, parallel, with evenly and rather feebly rounded sides, unimpressed; elytra transverse, with diverging sides, at base scarcely, at apex fully, as wide as the prothorax, the suture four-fifths as long as the latter; abdomen long, parallel, with straight sides, equal in width to the elytra, the first tergite feebly impressed, the second and third a little longer and not evidently impressed, the fourth still

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longer, fifth fully one-half longer than the fourth; legs rather short. Length 1.2 mm.; width 0.22 mm. Rhode Island (Boston Neck).

May be identified by its very small size, slender parallel form and cephalic and abdominal structure.

Asthenesita Csy.

The general habitus of this genus allies it also to the *Sipalia* series and renewed study seems to indicate a 5-jointed middle tarsus; the tarsal joints are extremely difficult to count in these very minute forms, unless mounted in Canada balsam. The intermediate coxæ are distinctly separated, the mesosternal process moderately acute and scarcely extending to their middle point, the metasternal projection unusually long, flat, acuminate, acutely defined and extending almost to the middle of the coxæ, where it is separated from the process by a very short but rather deep interval. The hypomera are as in *Sipalia*, the eyes rather small and there is a vestige of extremely fine though apparently subentire infralateral cephalic carinæ. The antennæ are unusually long and differ from those of any other ally of *Sipalia* in the very long second joint, which much exceeds the first and still more greatly the third, the tenth much less than twice as wide as long and a little longer than the ninth. The type is *Asthenesita pallens*, from southern Florida.

Gænima n. gen.

Body slender, linear, only moderately convex, the eyes well developed, the elytra large, with truncate apices but with the flanks extending posteriorly slightly further than the median parts, the fourth tergite largest, one to three and five equal in length, the first three each with a rather deep transverse basal concavity. Infralateral cephalic carinæ wholly wanting, the hypomera flat, feebly inflexed and wholly visible from the sides, the middle coxæ evidently separated, the metasternal projection rather long, its subacute and well defined tip only slightly distant from the mesosternal process, the tarsi rather short.

The type of this genus, described below, gives rise to some uncertainty regarding its true affinities. The prothorax has somewhat the habitus of a Phytosid, and, at first, the middle tarsi seemed to be 4-jointed, but the abdomen has a Sipaliid aspect and closer

observation seems to indicate Myrmedoniid tarsi. For the present therefore I am disposed to associate the genus with *Sipalia*, although the facies is quite different.

Gænima impedita n. sp.—Slender, very nearly parallel, feebly convex, somewhat shining, pale testaceous, the head piceous, the abdomen with a subapical black cloud, the legs pale; punctures small, not dense, the micro-reticulation of the abdomen unusually large, strong, polygonal; pubescence rather long and coarse, not dense; head large, much wider than long, barely visibly narrower than the prothorax, evidently inflated basally, the eyes prominent, rather coarsely faceted, at about one-half more than their own length from the base; antennæ short, wholly pale, the second joint cylindric, slightly shorter than the first, much longer and thicker than the third, which is obconic, fourth evidently transverse, fourth to tip rapidly and evenly becoming notably thick, the tenth joint between two and three times as wide as long, the last briefly conoidal, as long as the two preceding; prothorax about a fourth wider than long, widest near the apex, where the sides are rather strongly rounded, thence distinctly converging and straighter to the base, the median line impressed anteriorly and again, much more broadly, near the base; elytra subparallel, slightly shorter than wide, a fifth wider and a fourth longer than the prothorax; abdomen parallel, with nearly straight sides, distinctly narrower than the elytra, the fourth tergite longer than the third or fifth; legs short. Length 1.5 mm.; width 0.28 mm. California (locality unrecorded).

Recognizable by the slender and subparallel form, pale coloration, posteriorly narrowed prothorax, well developed elytra and the generic characters given above.

Hoplandria Kr.

The following species is smaller and narrower than *ochracea:*

Hoplandria brittoni n. sp.—Moderately stout and convex, shining, testaceous, the head and median parts of the pronotum blackish, the elytra infumate near the scutellum and postero-externally; abdomen black throughout, the legs piceous-black; punctures rather fine, well separated, the abdomen with well marked imbriform sculpture, becoming dense and asperate on the fifth and sixth tergites; pubescence rather long and coarse, pale, especially long and distinct on the abdomen; head but little wider than long, slightly less than three-fifths as wide as the prothorax, the eyes well developed, at less than their own length from the base, the tempora at first equally prominent, then broadly rounding and converging to the base; antennæ blackish, pale basally, the third joint much shorter than the second, fourth longer than wide, fifth to ninth gradually and rapidly becoming thick apically, passing from slightly to two-thirds wider than long, tenth distinctly longer and less transverse than the ninth, the last ogival, as long as the two preceding; prothorax

four-fifths wider than long, widest near the base, the sides rounding, becoming strongly converging and less arcuate thence to the apex, unimpressed; elytra at base as wide as the prothorax, the suture fully a fourth longer; abdomen at base slightly narrower than the elytra, the sides thence feebly converging and straight through the fifth tergite, which is four-fifths as wide as the first and nearly one-half longer than the fourth. Length 2.5 mm.; width 0.68 mm. Connecticut (Westville).

The female type differs from the female of *ochracea* in its rather narrower form, smaller head, larger and more anteriorly narrowed prothorax, in the unequal and less transverse two penultimate antennal joints, blacker and much more densely sculptured abdomen and in other directions; it was sent to me with a number of other species by Dr. W. E. Britton, of the Agricultural Experiment Station at New Haven, Conn., for whom it gives me pleasure to name it.

Tetrallus Bernh.

There can be but little or no doubt that this genus is a local modification of the Hoplandriæ, confined to the coast regions of California and to the northward, and that the African species placed here by Bernhauer, will be proved by an inspection of their sternal characters, to belong elsewhere in the series. The two following species are different from either *fenyesi* or *densepunctatus*, as shown by typical representatives of these species before me, and, of the latter, I have besides the Mill Valley cotype, a good series from Humboldt Co., taken at an unrecorded locality; *bicolor* Bernh., I do not know:

Tetrallus trinitatis n. sp.—Parallel, convex, rather shining, piceous-black throughout, the legs scarcely paler; punctures fine, rather feeble, moderately close, sparser on the abdomen, where the imbriform sculpture is very feeble but with the characteristic series of asperities along the tergitical apices; pubescence rather long, coarse and distinct, dark cinereous; head large, convex, much wider than long, fully three-fourths as wide as the prothorax, the eyes large, prominent, at two-thirds their length from the base, the tempora much less prominent and arcuato-convergent; antennæ rather short, rapidly and somewhat strongly incrassate distally, black, the four basal joints slender and pale, second as long as the first, much longer than the third, fourth strongly obtrapezoidal and fully as long as wide, five abruptly wider, five to ten subsimilar but rapidly increasing from distinctly transverse to two-thirds wider than long, the last rather longer than the two preceding; prothorax rather less than one-half wider than long, parallel, with subevenly and very moderately rounded sides, strongly rounded base and very obtuse blunt angles,

unimpressed; elytra slightly shorter than wide, with diverging and nearly straight sides, at base barely perceptibly wider, the suture almost one-half longer, than the prothorax; abdomen much narrower than the elytra, parallel, with nearly straight sides, the fifth tergite much longer than the fourth. Length 1.75 mm.; width 0.5 mm. California (Hoopa Valley of the Trinity River Basin, Humboldt Co.).

The female type is distinguishable readily from the female of *densepunctatus* by its less transverse prothorax, which is much less rounded at the sides, by its more parallel abdomen, smaller size and narrower form.

Tetrallus bernhaueri n. sp.—Rather convex, shining, black throughout, the legs not markedly paler, finely, rather closely punctate, the punctures evidently asperate on the elytra, coarser, close and very strongly asperate throughout on the abdomen, the pubescence rather short, fine and inconspicuous; head relatively smaller than in the preceding, two-thirds as wide as the prothorax, the eyes and tempora nearly as in *trinitatis*, the antennæ also similar in general form and coloration, except that the second and third joints are subequal, each a little shorter than the first, the fourth subparallel and scarcely so long as wide, fifth less abruptly wider, five to ten rapidly larger, the outer joints somewhat strongly transverse, the last barely as long as the two preceding; prothorax a little more than one-half wider than long, the parallel sides rather strongly arcuate, unimpressed; elytra scarcely visibly shorter than wide, with very feebly diverging sides, at base about as wide as the prothorax, the suture very broadly impressed except apically and about one-half longer than the latter; abdomen much narrower than the elytra, the sides distinctly converging and nearly straight, the fifth tergite shorter than the fourth. Length 1.8 mm.; width 0.52 mm. California (Pasadena).

Not closely allied to any other known to me and identifiable by its very strong asperate abdominal sculpture; the unique type was received from an unrecorded source and is a female; it is dedicated with pleasure to Dr. Max Bernhauer of Grünberg, Austria.

Pontomalota Csy.

This is one of the most anomalous genera of our Aleocharinæ and is completely isolated in the Myrmedoniini. With a facies recalling very closely some gigantic Phytosid, it has the tarsi plainly 4–5–5-jointed. There is no trace of infra-lateral cephalic carinæ; the hypomera are feebly inflexed and wholly visible from a lateral viewpoint and the elytral apices are deeply sinuate at each side, the flanks extending posteriorly much further than the median parts. The middle coxæ are rather widely separated, the rounded

apex of the moderately long mesosternal process rather free and only slightly removed from the notably long tumid subparallel metasternal projection, which, as well as the coxal cavities, is wholly devoid of a fine bead-like margin. The metasternum is very short behind the middle acetabula, and the rather thick hind tarsi have the first joint about one-half longer than the second. The following is a very distinct new species:

Pontomalota luctuosa n. sp.—Parallel, moderately convex, very opaque, the abdomen more alutaceous and feebly shining, the minute sculpture everywhere strong, the punctures not minute but shallow, moderately close but rendered by the opacity rather indistinct, those of the abdomen dense, stronger, asperate and distinct; color of the head strongly, of the abdomen feebly, deep blue-black, of the pronotum deep greenish-black, of the elytra evenly pale tawny-yellow, the legs pale, the pubescence very short, stiff, pale; head transverse, nearly three-fourths as wide as the prothorax, the eyes large, prominent, at only two-fifths their length from the base, the tempora straight, parallel and less prominent to the base; antennæ short, only very feebly incrassate, very pale, slightly infumate apically, the first three joints decreasing evenly in length and thickness, four to six moniliform, about as long as wide, seven to ten abruptly wider, increasing gradually, the latter evidently transverse, the last small, compressed at apex, not as long as the two preceding; prothorax large, about a fifth wider than long, with the sides very evenly rounded, widest before the middle and narrowest at base, the base transversely, the apex sinuously, truncate, the median line very feebly impressed; elytra short, the sides arcuate and gradually diverging, even at apex barely as wide as the prothorax, the suture three-fourths as long as the latter; abdomen long, parallel, about as wide as the elytra, with very thick margins, becoming thin on the fifth tergite, the tergites one to five equal, the first four more or less feebly impressed at base medially though not or barely at all laterally. Length 2.7–2.85 mm.; width 0.63 mm. Queen Charlotte Islands (Massett),—Keen.

The nearest relative of this species is *californica* Csy., but it is much stouter, differs greatly in color and especially in the feebler transverse abdominal impressions, which are all rather deep and distinct throughout the width and more shining in *californica*.

Strigota Csy.

This is one of the most widely distributed of the American genera, and it would be to some degree remarkable if some one of its numerous species should not have been hitherto described under another name; it belongs rather to the *Gnypeta* series than to any other, but its general habitus is sufficiently distinctive.

Strigota recta n. sp.—Parallel, convex, piceous-black and shining throughout, the elytra pale brown and duller, blackish along the suture, more broadly basally, the legs very pale; punctures very fine and feeble, close, rather dense but indistinct on the elytra, less minute, feebly asperulate and rather widely separated on the abdomen, the vestiture very short; head wider than long, more than three-fourths as wide as the prothorax, the eyes at about their own length from the base, the tempora parallel, broadly arcuate and slightly fuller than the eyes; antennæ only moderately long, rather heavy, gradually and moderately incrassate, blackish, picescent basally, the second joint longer than the first or third, fourth as long as wide, the outer joints nearly one-half wider than long, the last as long as the two preceding; prothorax less than a third wider than long, perfectly parallel, with very evenly and moderately rounded sides, unimpressed; elytra rather transverse, with diverging straight sides, at base barely as wide as the prothorax, the suture not quite so long as the latter; abdomen almost as wide as the elytra, parallel, the fifth tergite evidently longer than the fourth, four-fifths as wide as the first; hind tarsi long, slender, rather finely pubescent, the basal joint as long as the next two. Length 1.7 mm.; width 0.4 mm. Connecticut (New Haven),—Viereck.

In its less closely punctate abdomen this species differs greatly from the near by *oppidana*, and resembles more nearly *gnava*, from the Carolina mountains; it is narrower and more parallel than the latter, with less transverse prothorax and much less apically narrowed abdomen.

Subgenus **Eustrigota** nov.

Much stouter and more massive than *Strigota* and with shorter antennæ. The infra-lateral cephalic carinæ are very fine but apparently entire, the middle coxæ narrowly separated, the mesosternal process extending well behind their middle, with its very free tip subacute though not finely aciculate and separated from the transverse and very feebly subangulate metasternum by a moderately long deep interval. The hind tarsi are moderately long and slender, with the basal joint as long as the next two. The type may be described as follows:

Strigota (Eustrigota) seclusa n. sp.—Stout, rather convex and shining, blackish-piceous, the elytra and abdominal tip slightly paler, the legs blackish, pale distally; punctures minute, rather close, less minute, asperulate and moderately separated throughout the elytra and abdomen; pubescence short, dusky, longer on the abdomen; head almost as long as wide, only three-fifths as wide as the prothorax, the eyes at nearly their own length from the base, not very prominent, the tempora about equally so; antennæ rather short, blackish, barely at all paler basally,

very gradually and moderately incrassate, the second joint a little longer than the first or third, fourth nearly as long as wide, the tenth fully one-half wider than long, the last as long as the two preceding; prothorax three-fifths wider than long, the sides broadly rounded, more converging and gradually less rounded anteriorly, widest behind the middle, the base rounded, with the angles very obtuse, unimpressed; elytra well developed, rather transverse, with feebly diverging sides, at base barely as wide as the prothorax, the suture nearly a third longer; abdomen distinctly narrower than the elytra, parallel and somewhat broad basally, narrowing rather strongly behind, the fifth tergite parallel and subtubulate, three-fourths as wide as the first and fully one-half longer than the fourth, the first much the shortest, very strongly impressed transversely, the others not impressed. Length 1.73 mm.; width 0.48 mm. California (Catalina Island),—Fall.

Because of its stout form and certain general resemblances, this species might be placed inadvertently with *Acrotona* and allies; it is however not really related closely to that series but to *Strigota* and *Gnypeta*.

Gnypeta Thoms.

Much restricted in the European fauna, this genus becomes a very large one in subarctic North America and is not very homogeneous, which will necessitate, at some time, a division into several groups of at least subgeneric value. The following species are to be added to those previously described:

Gnypeta wickhami n. sp.—Stout, rather convex, shining, black, the elytra feebly picescent, the legs pale; punctures very minute, sparse, more distinct toward the sides of the head and a little larger on the abdomen, the three basal impressions of the latter smooth; pubescence not very short, rather long and stiff on the abdomen, dusky; head fully as long as wide, as wide as the prothorax, the eyes moderately prominent, at but little more than their own length from the base, the tempora broadly and gradually rounding to the base, somewhat less prominent, becoming subparallel at the eyes; antennæ long, slender, blackish, picescent basally, becoming rather rapidly and notably heavy distally, the second joint much longer but thinner than the first, only a little longer than the third, fourth one-half longer than wide, the fifth nearly as long, ninth as long as wide, tenth about a fourth wider than long, the last as long as the two preceding; prothorax relatively small, scarcely wider than long, the sides subangularly prominent but little before the middle, thence converging and nearly straight to the base, the median line faintly impressed, the transverse ante-scutellar impression large and deep; elytra broad, transverse, with broadly exposed humeri, three-fourths wider, the suture two-fifths longer, than the prothorax; abdomen broad, parallel, with slightly arcuate sides, at the middle nearly as wide as the elytra. Length 2.8 mm.; width 0.73 mm. Arizona (Pinal Mts.), —Wickham.

Not closely related to any other species known to me, but may be placed near *helenæ* (=*oregona* Csy.), in my previous revision (Tr. Acad. St. Louis, XVI, p. 193).

Gnypeta brunnescens n. sp.—Rather stout and convex, more parallel than the preceding, moderately shining, brown in color, the head and abdomen slightly darkest, the prothorax palest by a slight amount, the legs a little paler, brown, the elytra with a fine and very pale apical margin; punctures fine and close-set, dense on the elytra and abdomen, the three tergitical impressions somewhat strongly but not confluently punctate in single line; pubescence short, close; head wider than long, a little narrower than the prothorax, the eyes large, prominent, at less than their own length from the base, the tempora rounding and converging to the base, continuing the outline of the eyes; antennæ long, slender, dusky, gradually though only moderately incrassate distally, the first three joints equal in length, fourth and fifth elongate, the ninth and tenth about as long as wide, the last much shorter than the two preceding; prothorax well developed, very convex, slightly wider than long, the sides subprominently rounded near apical fourth, thence only feebly convergent and straight to the base, the median line coarsely and deeply impressed in basal half, wholly unimpressed anteriorly, the transverse basal impression wholly wanting; elytra parallel, moderately transverse, one-half wider and a third longer than the prothorax, the humeri well exposed at base; abdomen relatively narrow, very much narrower than the elytra, the sides parallel and nearly straight, just visibly dilated behind the middle. Length 2.6 mm.; width 0.6 mm. New York (near the city).

This fine species is decidedly isolated in its general form, close sculpture, coloration and other characters but may be placed near *nigrella* Lec., differing in color, in its denser punctures, larger and less transverse prothorax and other characters.

Gnypeta boulderensis n. sp.—Much less stout, moderately convex, shining, deep black throughout, the legs black; punctures fine, close-set, not quite so dense though a little stronger on the abdomen, where the three tergitical impressions are loosely and more strongly punctate; pubescence dusky, not conspicuous; head wider than long, fully as wide as the prothorax, the eyes at nearly one-half more than their own length from the base, the almost equally prominent tempora nearly straight and parallel for a long distance, then rapidly rounding to the base; antennæ black, extending only to basal third of the elytra, gradually and but feebly incrassate, the second joint about as long as the first but longer than the third, fourth slightly elongate, the fifth distinctly, the outer joints rather strongly, transverse, the last as long as the two preceding; prothorax slightly though distinctly wider than long, the sides rounded anteriorly, thence distinctly converging and straight to the base, the median line somewhat broadly, feebly impressed in more than basal half and with a very small but strong transverse ante-scutellar im-

pression; elytra only slightly transverse, with feebly diverging sides which are feebly rounding behind the middle, at base two-fifths wider, the suture nearly one-half longer, than the prothorax, the humeri moderately exposed at base; abdomen parallel, with nearly straight sides, much narrower than the elytra. Length 2.4 mm.; width 0.55 mm. Colorado (Boulder Co.).

May be placed near *punctulata* Csy., but more slender, with smaller and less transverse prothorax, much less incrassate antennæ, very much closer punctures and less shining surface throughout.

Gnypeta oblata n. sp.—Still more slender, rather convex, strongly shining, deep black throughout, the legs pale brown, the femora piceous-black; punctures fine and well separated, slightly granuliform on the pronotum, rather sparse on the abdomen, the three very deep tergitical depressions coarsely, closely punctate in slightly more than single line; pubescence inconspicuous; head as long as wide, fully as wide as the prothorax, the eyes anterior and at about three-fourths more than their own length from the base, the equally prominent tempora parallel and straight about half way, then very gradually broadly rounding to the base; antennæ piceous, rather long, gradually and very moderately incrassate distally, the second joint slightly longer than either first or third, fourth distinctly elongate, the tenth very slightly wider than long, the last conoidal, sharply pointed, not quite so long as the two preceding; prothorax as long as wide, the sides very prominently rounded at two-fifths from the apex, thence rather strongly converging and straight to the base and more converging and slightly rounded to the apex, with a strong, transverse and duplex ante-scutellar impression; elytra moderately transverse, rather convex, with feebly rounding sides except basally, about one-half wider and a fourth longer than the prothorax, the humeri well exposed though unusually oblique at base; abdomen gradually inflated posteriorly, behind the middle as wide as the elytra, at base much narrower, the first five tergites subequal in length. Length 2.6 mm.; width 0.52 mm. California (Siskiyou Co.).

May follow the preceding but resembling it in but few particulars; from *curtipennis* Csy., from the same region, it differs in its shorter and less punctate tergitical impressions, thicker abdomen, very much less incrassate antennæ, darker femora, looser punctuation and other features.

Gnypeta pallidipes n. sp.—More parallel, rather convex, somewhat slender, moderately shining, piceous-black throughout, the legs wholly pale brown, rather long; punctures fine, very close and strongly asperate on the pronotum and elytra, finer and sparser on the abdomen, the three tergitical impressions deep, strongly and closely punctate in rather more than single line; pubescence not very short, fuscous but distinct; head wider than long, not quite as wide as the prothorax, the eyes at their own length from the base, the tempora continuing their curvature;

antennæ brown, rather long, gradually and distinctly incrassate distally, the second joint as long as the first but much thinner, slightly longer than the third, fourth a third longer than wide, tenth about a fourth wider than long, the last not quite as long as the two preceding; prothorax parallel, very nearly as long as wide, slightly widest a little before the middle but with the sides broadly rounded, gradually less so basally and more so apically, the median line impressed shallowly from near the apex to the base in more than median fourth of the width; elytra not large, only slightly wider than long, parallel, with feebly arcuate sides, less than a third wider and a third longer than the prothorax, the humeri only very moderately exposed basally; abdomen only just visibly inflated posteriorly, behind the middle as wide as the elytra, and, at base, very nearly so, the fifth tergite much shorter than the fourth. Length 2.3 mm.; width 0.5 mm. Washington State (North Yakima),—Wickham.

Quite distinct in the peculiar form of the prothorax, which is subparallel and rather broadly rounded at the sides; also in the close asperate punctures and median impression of that somite, and the unusually parallel form of the body.

Gnypeta uteana n. sp.—Rather slender, moderately convex, strongly shining, black, the elytra feebly picescent, the legs piceous-black, pale distally; punctures fine, rather sparse, slightly closer and somewhat asperate on the elytra, fine and moderately close on the abdomen, the three tergitical impressions deep but somewhat fine, the well separated coarsish punctures forming scarcely more than a single line; pubescence moderate, not conspicuous; head fully as wide as the prothorax if not somewhat wider, a little wider than long, the eyes well developed, prominent, at scarcely their own length from the base, the less prominent tempora rounding in strong even arc to the base, becoming parallel behind the eyes; antennæ piceous-black, moderately long, very slender, gradually and very moderately incrassate distally, the first three joints subequal in length, fourth obtrapezoidal, fully a third longer than wide, fifth as long as wide, the joints thence gradually larger, the tenth about a third wider than long, the last sharply ogival, as long as the two preceding; prothorax very slightly wider than long, just visibly wider anteriorly than at base, the sides subparallel and very slightly arcuate, rounding anteriorly to the apex, the surface unimpressed, excepting two small and aproximate ante-scutellar foveæ; elytra but little shorter than wide, two-fifths wider and nearly one-half longer than the prothorax, the apices slightly sinuate laterally; abdomen much narrower than the elytra, parallel, with almost straight sides, the fifth tergite nearly one-half longer than the fourth. Length 2.0 mm.; width 0.5 mm. Utah (southwestern),—Weidt.

An aberrant species in the form of the prothorax; it may follow the last in a general arrangement and the two may come in just before the following at the end of the genus:

Gnypeta modica n. sp.—Rather stout and convex, polished, piceous-black, the elytra much paler, rufous, blackish at base, the legs rather pale, piceous; punctures very minute and inconspicuous, sparse, closer and larger toward the sides of the head, not more visible on the elytra, slightly more distinct on the abdomen, where the three tergitical impressions are sprinkled with coarser separated punctures; pubescence pale, rather long and coarse; head but little wider than long, as wide as the prothorax, the eyes moderately prominent, at a little less than their own length from the base, the tempora rapidly arcuato-convergent behind them to the base, becoming parallel just behind the more prominent eyes; antennæ moderate in length, piceous, slender, rather rapidly and distinctly thick distally, the first joint stouter and much longer than the second, the latter equal to the third, fourth nearly one-half longer than wide, the joints thence rapidly larger, the tenth two-fifths wider than long, the last conical, acute, as long as the two preceding; front feebly impressed at the centre; prothorax a fourth wider than long, very convex, widest near anterior third, where the sides are rather broadly rounded, thence becoming strongly convergent and more nearly straight to the base, the surface unimpressed, having before the scutellum two small and approximate, almost perforate foveæ; elytra large, rather transverse and convex, parallel, two-fifths wider and a third longer than the prothorax, the humeri broadly and transversely exposed at base; abdomen a good deal narrower than the elytra, parallel, with nearly straight sides, the first tergite shortest, the fifth large, fully one-half longer than the fourth. Length 2.2 mm.; width 0.56 mm. Arizona (Tuçson).

Very greatly resembles a *Euliusa* and constituting perhaps one of the bonds between the two groups; it is distinguishable at once from *Euliusa pimalis*, inhabiting the same locality, by its smaller size and narrower form, less prominent eyes, less angularly prominent sides of the prothorax anteriorly and the unimpressed median basal part of the pronotum, rather shorter antennæ and especially by the coarse punctures scattered over the tergitical impressions, these being smooth and punctureless in *pimalis*.

The Pomona example, which I placed with the Mendocino and Sonoma *linearis* in my revision of this genus (l. c., p. 200) is really not identical but may be attached to *linearis* as a variety as follows:

Gnypeta sensilis n. subsp.—Form and coloration nearly as in *linearis* but rather more convex throughout and with more close-set punctures, the long and gradually incrassate, piceous-brown and basally gradually pale antennæ nearly similar, but with a longer terminal joint, this being as long as the two preceding joints combined; prothorax differing decidedly, being less parallel and less transverse, in fact only just visibly wider than long, with the sides more rounding and converging anteriorly, so that the apex is more evidently narrower than the base though, be-

cause of the more sensibly converging sides posteriorly, the base is actually and relatively much narrower than in *linearis;* elytra a little shorter, the abdomen similar; linear dimensions almost identical. California (Pomona, Los Angeles Co.).

The pronotum is feebly concave in more than median third, from before the middle to the base; this impression is however fugitive, and sometimes appears in *linearis.* I am about convinced that there are two distinct species involved, but will leave the subject as announced above for the present.

Subgenus **Euliusa** Csy.

There is so much general similarity between the species separated generically under this name and those of *Gnypeta*, that the propriety of uniting them in a subgeneric relationship is sufficiently evident.

Gnypeta (Euliusa) limatula n. sp.—Moderately stout, convex, polished, testaceous-brown in color, the head barely at all darker, the legs pale; punctures minute and everywhere very sparse, not distinctly larger toward the sides of the head; pubescence moderately short, rather coarse, pale; head nearly as long as wide, very nearly as wide as the prothorax, the eyes moderately convex, at a little more than their own length from the base, the tempora forming an evenly converging arc from the eyes to the base; antennæ moderately long, pale, slightly infumate and rapidly, somewhat strongly incrassate distally, the second joint as long as the cylindric first but not quite so thick, the third barely evidently shorter, fourth nearly three-fourths longer than wide, the tenth two-fifths wider than long, the last fully as long as the two preceding; prothorax rather small, only very little wider than long, prominently rounded at the sides at two-fifths from the apex, the sides thence strongly convergent and subsinuate medially to the base, the surface feebly impressed medially toward base and with two minute ante-scutellar punctures; elytra moderately transverse, about two-fifths wider and a third longer than the prothorax, the humeri well exposed at base; abdomen slightly narrower than the elytra, the sides parallel and very slightly arcuate, the three tergitical impressions deep, rather sharp and smooth. Length 2.5 mm.; width 0.57 mm. Southern California.

To be placed at the end of the series and identifiable readily by reason of the peculiar form of the head.

Teliusa Csy.

The following species is closely allied to *alutacea* and may prove to be more properly a subspecies. *Teliusa* appears to be a local development of the Gnypetæ, confined to the Rio Grande Valley:

Teliusa malaca n. sp.—Similar to *alutacea* in coloration, dense opacity and very fine dense punctures and pubescence throughout the body, legs and antennæ; head but little wider than long, very nearly as wide as the prothorax, the eyes rather large and prominent, at nearly three-fourths their length from the base, the tempora less prominent, straight and parallel for one-half their length, then strongly oblique to the base; antennæ pale, long, very slender, gradually, feebly incrassate distally, the second joint slightly longer than the first and distinctly longer than the third, two to four uniformly and rapidly decreasing in length, four to six slowly decreasing but barely thicker, from two-thirds to one-half longer than wide, seven to ten more obtrapezoidal, gradually widening from two-fifths longer than wide to as long as wide, the last as long as the two preceding; prothorax just visibly wider than long, widest and with rather prominently rounded sides at apical fourth, the sides thence feebly converging and subsinuate to the base, the median line rather strongly impressed basally, obsoletely anteriorly; elytra transverse, nearly one-half wider and not quite a third longer than the prothorax, the humeri well exposed at base; abdomen much narrower than the elytra, parallel basally, gradually tapering posteriorly, the fifth tergite more than one-half longer than the fourth. Length 2.0 mm.; width 0.48 mm. Texas (Del Rio),—Wickham.

Differs from *alutacea* in its smaller size and more slender form, particularly the more slender abdomen with less arcuate sides, distinctly smaller and less prominent eyes and in certain details of antennal structure, the antennæ in *alutacea* being slightly longer and still less incrassate distally, with the third joint less distinctly shorter than the second and the fourth fully twice as long as wide.

Tachyusa Erichs.

A genus of slender graceful Staphylinids, rather well developed in subarctic North America from the Atlantic to the Pacific; this continent, however, does not appear to possess any species of the *Caliusa* type.

Tachyusa virginica n. sp.—Slender, shining, pale testaceous, the head but slightly darker, the fourth tergite and most of the fifth blackish; punctures minute and sparse throughout, the three tergitical impressions coarsely, very densely punctate, the medial carina indistinct; pubescence rather long and distinct; head very nearly as wide as the prothorax, nearly as long as wide, the eyes prominent and at a little more than their own length from the base, the less prominent tempora at first feebly converging, then gradually broadly arcuate and more converging to the base; antennæ long and very slender, pale brown, still paler basally, only feebly and very gradually incrassate, the first three joints subequal in length, fourth and fifth twice as long as wide, ninth slightly elongate,

tenth a little shorter than the ninth but as long as wide, the last as long as the two preceding; prothorax just visibly wider than long, slightly widest but little before the middle, the sides broadly rounded, slightly converging and less arcuate basally, more rounded and converging apically, the surface with a feeble indentation in median fourth from near the apex, obsolescent near the base; elytra two-fifths wider and a fourth longer than the prothorax, the humeri moderately exposed at base; abdomen slender, inflated posteriorly, minutely, very remotely punctate and with coarse sparse hairs, the first three tergites much longer than the fourth, the fifth still shorter. Length 3.0 mm.; width 0.58 mm. Virginia (Fredericksburg).

Distinguishable from *gracillima* Lec., by the less rapidly and much less strongly incrassate distal part of the antennæ and relatively much broader prothorax and elytra.

Tachyusa silvatica n. sp.—More slender, strongly convex, much less shining, subalutaceous, finely, very closely punctured and pubescent throughout, the three tergitical impressions with the coarse punctures longitudinally confluent, producing numerous fine carinæ which are but little less pronounced than the medial carinule; color blackish-castaneous, the elytra but faintly paler, the first two tergites testaceous, the legs pale brown; head but slightly wider than long, as wide as the prothorax, the eyes at their own length from the base, the equally prominent tempora forming an even circular arc to the base, becoming parallel behind the eyes; antennæ moderately thick, rather long, piceous, gradually and distinctly incrassate, the first two joints subequal in length, the third but little shorter, fourth two-thirds, the fifth one-third, longer than wide, ninth almost as long as wide, the tenth a third wider than long, the last distinctly shorter than the two preceding; prothorax convex, somewhat shining, as long as wide, slightly widest a little before the middle, the sides broadly rounded, becoming more convergent but arcuate apically, slightly converging and straight thence to the base, the surface in the type wholly unimpressed, excepting a subobsolete transverse ante-scutellar indentation; elytra about as long as wide, parallel, the sides rounding and feebly converging posteriorly, a fourth longer and scarcely a third wider than the prothorax, the humeri slightly exposed at base; abdomen slender basally, dilated posteriorly, the fourth and fifth tergites equal in length, shorter than one to three. Length 2.8 mm.; width 0.4 mm. New York (Ithaca).

Differs from *americana* Csy., in its denser fine punctures, larger head, with more broadly rounded basal angles, much more incrassate and less slender outer part of the antennæ; in having the widest part of the narrower prothorax slightly less anterior, in its paler coloration and in many other respects. The type of *americana* is from the Catskill Mts., but the Pennsylvania and Iowa examples seem to be identical.

Tachyusa meraca n. sp.—Rather slender, only moderately convex, slightly shining, the punctures fine but rather asperate and close, minute and sparser on the more shining abdomen, where the punctures of the impressions are coarse and crowded but not producing well defined secondary carinæ; pubescence rather close; color black or nearly so, the elytra but little paler, the abdomen feebly paler basally, the legs pale brown; head distinctly wider than long, almost as wide as the prothorax, the eyes rather small, at much more than their own length from the base, the slightly less prominent tempora broadly rounding at base, becoming subparallel behind the eyes; antennæ notably small, slender, only feebly incrassate, piceous, slightly paler basally, the first two joints subequal in length, the third but little shorter, fourth more, the fifth less, than one-half longer than wide, the outer joints about a fourth wider than long, the last slightly longer than the two preceding; prothorax rather large, distinctly wider than long, slightly widest at apical fourth, where the sides rapidly round to the apex, feebly convergent and straight thence to the base, the basal angles very sharp and minutely subeverted, the surface unimpressed, excepting a small feeble transverse and subduplex ante-scutellar impression; elytra two-fifths wider and a third longer than the prothorax, slightly transverse, the sides only slightly converging posteriorly; abdomen gradually narrowed and with straight sides basally, enlarged apically, the fifth tergite shorter than the fourth. Length 2.6 mm.; width 0.46 mm. Massachusetts.

The only species with which this can be compared is *americana*, and it differs in its larger and broader head, with rather more prominent eyes, in the much smaller antennæ, with shorter outer joints, in having the broader and larger prothorax widest much nearer the apex and with more pronounced basal angles, in its paler legs and broader and more gradually inflated abdomen.

Tachyusa ohioana n. sp.—Small, slender, convex, alutaceous, the abdomen more shining; punctures fine and very close-set, less so but more strongly asperate on the elytra, numerous on the abdomen, where the coarser punctures of the impressions are moderate, the medial carina very fine; pubescence rather long and distinct on the elytra and abdomen, shorter and denser anteriorly; color dark castaneous, the head blackish, the elytra slightly pale, especially at apex, the abdomen testaceous, black posteriorly, the legs very pale flavate; head nearly as long as wide, subquadrate, sensibly narrower than the prothorax, the eyes not prominent, at rather more than their own length from the base, the tempora almost continuing their curvature, broadly rounding and converging to the base; antennæ only moderate in length, very slender, distinctly incrassate only near the tip, piceous, paler basally, the second joint much longer than the third, fourth a little more, the fifth slightly wider and a little less, than one-half longer than wide, the tenth about as long as wide, the last slender, subparallel, about as long as the two preceding; prothorax (♀) well developed, only very little wider than long, perfectly

parallel, with evenly and feebly arcuate sides and rather strongly, subequally rounded base and apex, the median line only moderately widely and rather feebly impressed, more finely anteriorly and posteriorly; elytra parallel, as long as wide, scarcely more than a fifth wider and a third longer than the prothorax, the humeri only very narrowly exposed at base; abdomen at base two-thirds, near the apex not quite, as wide as the elytra, the fourth and fifth tergites subequal in length; legs long and slender. Length 1.8 mm.; width 0.32 mm. Ohio (Cincinnati),—Chas. Dury.

Belongs to the *cavicollis* and *carolinæ* group of very small delicate species, in which the pronotum is more or less conspicuously and broadly impressed along the middle in the female, though scarcely at all in the male; it differs from *carolinæ* in the much feebler pronotal impression, larger prothorax and more slender antennæ; from the male of *cavicollis* it differs in its less transverse prothorax and larger head.

Tachyusa vaciva n. sp.—Rather slender, convex, shining, black, the elytra scarcely paler but with a fine pale apical border, the abdomen faintly rufescent basally, the legs piceous-brown; punctures fine, sparse on the head, closer and becoming rather dense and asperate toward base on the pronotum, asperate and close on the elytra, very sparse and with long pubescence on the abdomen, except behind the third tergite, where they become minute and dense and with shorter, denser pubescence, the latter anteriorly moderately long and coarse, palish; head notably small, almost as long as wide, much narrower than the prothorax, the eyes prominent, at their own length from the base, the much less prominent tempora at first feebly converging, than broadly rounding to the base; antennæ pale, infumate and moderately incrassate distally, extending to the middle of the elytra, the first three joints subequal in length, fourth two-fifths, the fifth one-half, longer than wide, tenth as long as wide, the last not quite as long as the two preceding, obtuse at tip; prothorax just visibly wider than long, widest at two-fifths from the apex, where the sides are broadly rounded, thence rounded and strongly converging to the apex and just visibly converging and straight to the base, the latter broadly rounded, much wider than the rectilinearly truncate apex, the median line moderately impressed from before the middle nearly to the base; elytra as long as wide, parallel, arcuately narrowing apically, two-fifths wider and longer than the prothorax, the humeri moderately widely exposed at base; abdomen at base three-fifths, at the apex of the third tergite four-fifths, as wide as the elytra, the fourth and fifth tergites equal in length. Length 2.8 mm.; width 0.45 mm. California (Dunsmuir, Siskiyou Co.),—Wickham.

In this, as well as the types of *faceta* and *vespertina*, the sixth ventral is evenly rounded behind and they are therefore probably females, but quite different in aspect from the Atlantic species; the present

differs from *faceta* in its rather smaller head, longer and somewhat heavier antennæ, in having the maximum width of the prothorax less anterior and in its longer tarsi; from *vespertina* it differs in its larger size, less transverse prothorax, coloration and other features. The type was erroneously considered under *faceta* (Tr. St. Louis, XVI, p. 212); the latter species is confined to the coast regions from about Napa to Sta. Clara; *vespertina* belongs to the fauna of southern California.

Chitalia Sharp.

The two following species were overlooked in my previous revision of the genus (l. c., p. 232):

Chitalia turbata n. sp.—Moderately stout and convex, polished, blackish-rufopiceous, with feeble bronzy lustre, the legs pale brown; punctures of the head and abdomen very minute and sparse, of the elytra minute, granuliform, dense toward the scutellum, of the pronotum fine and sparse externally but becoming strong, dense and graniform in a wide area toward the deep sulcus; head only slightly wider than long, somewhat wider than the prothorax, the eyes at a little less than twice their own length from the base, the tempora equally prominent, parallel, and broadly arcuate, the basal angles broadly rounded, the base broadly arcuate; antennæ dark piceous, slightly paler basally, moderately long, notably thick, heavy and gradually incrassate, the second joint very much longer than the first and as long as the next two, the third slightly longer than wide, fourth as long as wide, tenth not quite so long as wide, the last short, ogival, barely one-half longer than the tenth; prothorax as wide as long, prominently rounded at the sides at apical third, the sides thence strongly convergent and sinuate to the base, which is scarcely half the maximum width, the sulcus deep; scutellum densely and strongly, evenly granose throughout, without trace of parting or channel along the middle; elytra rather transverse, one-half wider and a fourth longer than the prothorax; abdomen parallel, with feebly arcuate sides, at the middle almost as wide as the elytra, the fifth tergite equal to the fourth, the basal impressions large, roughly, coarsely and densely punctate, the fourth tergite also impressed and coarsely punctate at base but less conspicuously. Length 3.0 mm.; width 0.62 mm. New Jersey (Elizabeth).

Distinguishable from *scutellaris* by the completely unchanneled scutellum and, from *nigrescens*, it may be known by its larger head, shorter, thicker antennæ, broader abdomen, rather longer and thicker legs, with more hairy tibiæ and by other characters. The type was erroneously included with the Iowa type of *nigrescens* (l. c.).

Chitalia novella n. sp.—Small, rather slender, convex, polished throughout, dark testaceous, the legs pale and more flavate; punctures minute

and sparse, not dense, but feebly granuliform toward the scutellum, nowhere conspicuous on the pronotum, the pubescence sparse, palish; head somewhat wider than long, very slightly wider than the prothorax, the eyes prominent, at much more than their own length from the base, the latter broadly arcuato-truncate, with well marked rounded angles; antennæ dark piceous-brown, the basal joint paler, extending to the middle of the elytra, very gradually but distinctly incrassate and moderately thick distally, the second joint barely at all longer than the first or third, fourth slightly longer than wide, parallel, fifth but little shorter than wide, the tenth not more than a third wider than long, the last slightly shorter than the two preceding; prothorax somewhat wider than long, very prominent laterally at apical third, the converging sides sinuate, the base nearly two-thirds the maximum width, the sulcus deep and sharply impressed; elytra nearly one-half wider and a third longer than the prothorax, the humeri widely and obliquely exposed at base; scutellar granules not dense, irregularly and widely parted along the middle; abdomen subparallel, with slightly arcuate sides, not quite so wide as the elytra, the deep tergitical depressions strongly, roughly and closely punctate, with a few smaller punctures scattered over the feeble impression of the fourth tergite. Length 2.2 mm.; width 0.45 mm. Texas (Austin).

Allied to the Florida *partita* and *floridana*, the latter being distinguished from either of the others by its much smaller prothorax, broader abdomen, shorter, more compact antennæ, with very transverse outer joints and by the almost impunctate tergitical impressions. The present species may be known from *partita*, which it resembles almost exactly in general form and the proportion of its parts, coloration and sculpture, by its longer antennæ, which are less thickened distally and with less transverse outer joints and longer terminal joint.

Lorinota Csy.

The small frail eastern species, constituting the second section of this genus, may themselves be separated into two distinct groups, the first having the head circularly rounded at base, including the species described by the writer under the name *cingulata* Lec., but with the elytra not cingulate and therefore probably not that species, and *tenuicornis* Csy., and the second including *gracilis*, *parva* and *bilimbata* Csy., having the head larger and subtruncate at base. During the past summer I obtained a species on the Blue Ridge, in Franklin Co., Penn., which differs from any other known to me; the elytra are dark but very pale at each side of the base and along the apex, thus warranting the name *cingulata* very

markedly; it is quite possible that this may be the original *cingulata* of LeConte, and I will therefore leave it undefined for the present; the abdomen is finely, closely punctulate and subalutaceous and the head well developed and truncate at base, thus placing it in a different group from the one described by me as *cingulata* (Tr. Acad. St. Louis, XVI, p. 243). The following is allied closely to *cingulata* Lec. (Csy.):

Lorinota sinuosa n. sp.—Moderately stout, shining and convex, pale and almost uniform brown throughout, the abdomen darker behind the second tergite, the first two more flavate, the elytra not noticeably paler at the apex and humeri; legs very long, pale brown; head rather small, scarcely at all wider than the prothorax, circularly rounded behind the eyes, which are rather small and prominent; antennæ long, becoming gradually and notably heavy distally, pale brown in color, the first three joints very long, the second and third equal, fourth twice as long as wide, the fifth but little shorter, tenth rather longer than wide, the last as long as the two preceding; prothorax slightly longer than wide, convex, widest and with rather prominently rounded sides near apical third, the sides thence converging posteriorly, becoming notably sinuate near the basal angles, the sulcus entire, deep, its slopes sparsely granulose; elytra slightly wider than long, parallel, the sides arcuate except basally, the humeri broadly exposed, three-fourths wider and a fourth longer than the prothorax, the surface basally and the scutellum granose, the latter not at all carinate medially; abdomen parallel, with arcuate sides, much narrower than the elytra, the first tergite finely, sparsely punctate, the large basal impression coarsely, very closely and confluently punctate. Length 2.3 mm.; width 0.55 mm. Wisconsin (Bayfield),—Wickham.

The type was included with the material described as *cingulata* Lec., in my revision alluded to above; but it evidently differs from that species, as represented alone by Pennsylvania specimens,—the Iowa forms, originally included through inadvertence, being *tenuicornis*—in the much heavier antennæ distally, deeper sinuation of the thoracic sides near the basal angles and denser and more confluent punctures of the tergitic impressions.

Falagria Mann.

The scutellum in this genus has two sharply elevated parallel carinæ along the middle, distinguishing it from any other group of the Falagriæ.

Falagria sterilis n. sp.—Moderately slender, convex, highly polished throughout, piceous-black, the elytra barely visibly rufescent, the legs very dark brown; punctures everywhere very fine and rather sparse,

not differing in character toward the scutellum as is the case in some other genera, coarse, somewhat rough and close along the bottoms of the mutually equal, deep and rather sharp three tergitical impressions; pubescence inconspicuous; head but little wider than long, slightly wider than the prothorax, parallel, the eyes at nearly their own length from the base, not evidently more prominent than the tempora, which are straight and parallel to the broadly rounded angles; antennæ moderately long, blackish, picescent basally, gradually, strongly incrassate and thick distally, the basal joint long, slender, cylindric, as long as the second and only a little thicker, the third but little shorter, fourth slightly elongate, fifth as long as wide, the joints thence becoming much larger and rather strongly transverse, the tenth longer and more parallel than the ninth, a third wider than long, the last scarcely one-half longer than the tenth; prothorax slightly wider than long, very prominent laterally near apical fourth, the sides abruptly converging and sinuate thence to the base, which is rather more than half the maximum width, the sulcus deep and abruptly excavated; elytra posteriorly three-fourths wider, the suture barely a third longer, than the prothorax; abdomen very slightly widest behind the middle, where it is as wide as the elytra, the fourth and fifth tergites more closely punctulate and somewhat darker than the others, the fifth shorter than the fourth. Length 1.72 mm.; width 0.42 mm. Utah (southwestern),—Weidt.

Differs from *subsimilis* in the more slender and cylindric basal joint of the antennæ, and from *texana*, it differs in its larger head, less incrassate antennæ, with much less transverse outer joints, less rounded sides of the abdomen, with broader fifth tergite, and in many other characters. From *angulata*, to which it is more closely allied, it differs in its smaller size, less conspicuous pubescence, relatively narrower prothorax and shorter legs and tarsi; also in its more slender and elongate fourth antennal joint.

Tribe BOLITOCHARINI.

In my two previous papers touching this tribe (Ann. N. Y. Acad., VII, p. 348, and Tr. Acad. St. Louis, XVI, p. 344), several errors occurred, due to miscounting the joints of the middle tarsi, a very difficult and uncertain matter in many cases when the tarsus is *in situ*. These errors should be corrected as follows;—they have been alluded to above under the Myrmedoniini:

Asthenesita Csy., (l. c., p. 365) belongs near the Myrmedoniid *Sipalia* Rey.

Sipalia Rey (Csy.), (l. c., p. 366) is a new subgenus of *Pasilia* Rey, described below.

Silusida nanella Csy., (l. c., sec., p. 271) is a Myrmedoniid, redescribed (Mem. Col., I, p. 109) under the name *Sableta* (*Canastota*) *beatula*.

Pancota Csy., (l. c., sec., p. 345) is a Myrmedoniid and was redescribed (Mem. Col., I, p. 136), under the name *Dolosota.*

Sibiota Csy., (l. c., sec., p. 350) is a subgenus of the Myrmedoniid *Sipalia* Rey.

Autalia Mann.

Closely resembles some of the Falagriæ in general habitus but probably not closely related phylogenetically. There are a number of species in our Pacific coast region, but thus far none has come to light in eastern North America; the following are represented for the most part by good series in my cabinet:

Autalia copiosa n. sp.—Large and notably stout, convex, strongly shining, black, the abdomen basally and the elytra feebly rufescent, the legs pale; punctures extremely fine and sparse throughout, not asperate except on the fifth tergite, where they are closer and asperate, the three deep tergitical impressions closely granulo-reticulate, crossed by three strong carinæ and limited at each side by a smooth elevated space; pubescence sparse but rather long, grayish; head evidently wider than the prothorax, as long as wide, semicircularly rounded behind the eyes, which are moderately prominent; antennæ black, long and very heavy, also gradually and distinctly incrassate, the first three joints equal in length, fourth nearly one-half longer than wide, fifth a little shorter though elongate, sixth as wide as long, the tenth a third wider than long, the last much shorter than the two preceding; prothorax barely as long as wide, widest at two-fifths from the apex, where the sides are rather prominently rounded, thence strongly converging to the apex and very feebly converging and subsinuate to the base, the median sulcus distinct anteriorly but obsolete basally, where the four longitudinal impressions are well developed; elytra large, slightly wider than long, feebly swollen apically, rather more than twice as wide as the prothorax and three-fourths longer, the two basal impressions on each distinct; abdomen narrower than the elytra and, at base, three-fourths as wide, feebly swollen apically. Length 1.85–2.4 mm.; width 0.5–0.68 mm. California (Sta. Cruz Co.).

The large series before me displays very little variability except in size. This species differs from *elegans* Csy., in its stouter form, darker coloration, stouter but less distally incrassate antennæ, relatively somewhat larger prothorax and less parallel abdomen, with the carinæ crossing the impressions much more developed.

Autalia truncatula n. sp.—Moderately stout and convex, strongly shining, the coloration as in *copiosa;* punctures minute and sparse, scarcely at all asperulate except on the abdomen apically and toward the base of the pronotum, where the punctures take the form of large subelongate granules; abdominal impressions as in the preceding, except that the lateral carinæ are not fine, like the medial, but very broad and flat; pubescence sparse though notably long and bristling; head slightly

wider than long and barely at all wider than the prothorax, circularly rounded behind the eyes though forming less than a semicircle; antennæ moderately long, black, picescent basally, gradually and distinctly incrassate, the second joint evidently shorter and thicker than the third, fourth barely at all longer than wide, the fifth somewhat, the tenth about a third, wider than long, the last distinctly shorter than the two preceding; prothorax somewhat longer than wide, widest at apical fourth or fifth, where the sides are narrowly rounded, thence almost transversely converging to the narrow apex and feebly converging and straight to the base, the impressions as in *copiosa*, except that the two basal longitudinal furrows are longer; elytra wider than long, four-fifths wider and barely one-half longer than the prothorax, each with the usual two basal impressions; abdomen much narrower than the elytra, feebly swollen apically. Length 2.0–2.3 mm.; width 0.64–0.68 mm. Queen Charlotte Islands (Massett),—Keen.

Wholly different from the Californian *elegans–copiosa* type in many ways, chiefly relating to the much more anterior maximum width of the prothorax, sculpture and antennal structure.

Autalia brevicornis n. sp.—Moderately slender and convex, deep polished black throughout, the legs pale, the femora a little darker; punctures fine, sparse, scarcely asperate, becoming elongate granules on the pronotum except apically and rather close and asperate throughout the abdomen, the three deep impressions of the latter nearly as in the preceding, except that the lateral carinæ are fine and not broad and flat; pubescence moderately long, not conspicuous; head narrower, nearly as long as wide, fully semicircular behind the eyes, the antennæ unusually short, barely longer than the head and prothorax, piceous-black, rather thick, gradually incrassate, the second joint as long as the first, much longer but barely thicker than the third, fourth barely as long as wide, the fifth slightly, the tenth fully two-thirds, wider than long, the last slightly shorter than the two preceding, pyriform; prothorax throughout nearly as in *truncatula* but rather narrower and fully as long as wide, very slightly narrower than the head; elytra slightly transverse, swollen and rounded at the sides, the latter becoming straight and parallel at base, twice as wide as the prothorax and not quite one-half longer, the two basal furrows on each distinct; abdomen formed nearly as in the preceding, the fifth tergite much shorter than the fourth as usual. Length 1.75–2.2 mm.; width 0.4–0.5 mm. British Columbia (Metlakatla),—Keen.

Belongs to the same group as *truncatula* and having, as in that species, the median abdominal carinæ long and extending almost to the segmental apices on the first two tergites, but short and not quite crossing the impression on the third tergite. This species differs from *truncatula* in its very short antennæ, with a much longer second joint and in having the entire abdomen much more closely

punctate; the apical margin of the prothorax in front of the line of maximum width is not quite so transverse.

Stictalia Csy.

This genus appears to be distinct from *Bolitochara* and not properly a subgenus; it differs so greatly in its very wide neck and unconstricted base of the head, that there can be no doubt of a considerable degree of taxonomic isolation, though forming one of the *Bolitochara* group of genera. It is peculiar to the Pacific coast fauna and the species are numerous and closely allied among themselves, so that much care is necessary in identification. At the same time there is a good deal of diversification, as may be seen in passing from *punctiventris* to *californica*, then to *collaris* and finally through the small forms such as *brevicornis*. I am unable to announce any synonymy among the species as hitherto published, though there are several that may prove to be rather subspecies than species. The following is quite distinct from any other in its very much finer sculpture throughout:

Stictalia carlottæ n. sp.—Somewhat stout, moderately convex, slightly shining, the micro-reticulation small, rather strong, obsolescent on the strongly shining abdomen; color pale castaneous, the head piceous, the elytra rather pale, infumate toward the scutellum and broadly toward the outer posterior parts, except at the immediate hind angles which are pale, the abdomen piceous-black throughout, the legs pale; punctures fine, feeble, not dense, rather close and asperate on the elytra, fine but strongly asperate and rather close throughout the abdomen; pubescence rather short and coarse, pale; head but little wider than long, the eyes prominent, at scarcely their own length from the base, the tempora less prominent, rounding to the base, becoming parallel behind the eyes; antennæ short, slender and pale basally, infumate and rapidly, evenly and strongly incrassate distally, the second and third joints subequal, each much shorter than the first, the fourth obtrapezoidal, as long as wide, the tenth nearly twice as wide as long, the last as long as the two preceding, sharply ogival; prothorax nearly one-half wider than long, evidently wider than the head, widest at two-fifths from the apex, where the sides are rather broadly rounded, thence slightly converging and straighter to the base, the angles rather sharp, obtuse, the surface with a very feeble simple transverse ante-scutellar impression; elytra large, about as long as wide, parallel, slightly tumid at each side of the suture behind the scutellum, two-fifths wider and more than two-thirds longer than the prothorax; abdomen distinctly narrower than the elytra, parallel and straight at the sides, narrowing very slightly at apex, the three basal impressions strong. Length 2.7 mm.; width 0.72 mm. Queen Charlotte Islands (Massett),—Keen.

May be placed near *obsolescens* but differing in coloration, in its much larger elytra and many other features.

Eumicrota Csy.

The following species was found among some duplicate material in *Oligota*, to the ordinary forms of which it bears considerable resemblance in size and outline:

Eumicrota oligotina n. sp.—Rather narrow and subparallel, convex, moderately shining, the reticulation large and distinct throughout; punctures of the head very minute and few in number, of the pronotum numerous, fine but asperate, parted along the middle, of the elytra also numerous and more strongly asperate, becoming notably close-set apically throughout the width, of the abdomen wanting, except a few bearing stiff setæ along the tergitic apices; color piceous-black, the elytra barely at all picescent, the legs pale; head well developed, three-fourths as wide as the prothorax, the eyes prominent, not quite attaining the base, the antennæ notably small, pale, the joints from the sixth to the apex parallel, six to ten about twice as wide as long; prothorax four-fifths wider than the median length, which is very much greater than that of the sides, the latter converging and arcuate from the somewhat rounded basal angles to the apex, the base narrowly truncate medially, thence oblique and straight to each angle; just within the basal margin the canaliculation from side to side is unusually deep and pronounced; elytra transverse, parallel, with straight sides, the suture equal in length to the prothorax and very much shorter than the flanks; abdomen about as wide as the elytra, only very slightly narrowed and with feebly arcuate sides to the tip, the fifth tergite (♂) nearly four-fifths as wide as the first and having two short, feeble, very strongly and posteriorly converging, slightly arcuate discal carinules in about median fifth of the width, the sixth flat and strongly rounded medially. Length 0.9 mm.; width 0.31 mm. Missouri (St. Louis). In fungus.

The only species with which this can be compared is *atoma*, it having nearly similar male sexual characters, but it is less minute, has a narrower and more parallel form, a relatively more developed head, much less transverse prothorax, closer thoracic and elytral punctures and notably smaller antennæ.

Gyrophæna Mann.

Species of this genus occur in profusion over the colder parts of North America but are less abundant on the Pacific coast, though of late several new forms have been sent in from those regions. The following was overlooked in my revision of the genus (Tr. St. Louis, XVI, p. 289):

Gyrophæna attonsa n. sp.—Stout, moderately convex, polished, the abdomen a little less so, pale testaceous, the head blackish-piceous, the elytra more silvery-flavate, the fourth tergite feebly infumate in great part; head very moderate, transverse, three-fourths as wide as the prothorax, the eyes very prominent, the converging tempora behind them very short; front with a few scattered coarse punctures between the broad and subconvex impunctate and entire median line and each eye; antennæ short, moderately setose, pale, gradually and moderately incrassate, the third joint much shorter and thinner than the second, fourth and fifth not longer than wide, the outer joints slightly transverse, the last as long as the two preceding; prothorax short and very transverse, twice as wide as long, broadly and rather strongly rounded from side to side at base, the sides parallel, much shorter than the median line, rounding anteriorly, the surface with two large foveiform punctures, placed transversely at basal third and near the median line, also a few other finer punctures widely scattered; elytra transverse, parallel, only about a fourth wider, the suture a fourth longer, than the prothorax, having only a few rather large and feeble indentations postero-externally; abdomen at base nearly as wide as the elytra, feebly, subevenly tapering thence to the apex, with but just visibly arcuate sides, the punctures basally rather numerous but extremely feeble and not well defined; sixth ventral plate (♀) acutely angulate. Length 2.0 mm.; width 0.63 mm. New York (Catskill Mts.).

This species has a large prothorax, almost as wide as the elytra, as in *vitrina* Csy., but it is here shorter and more transverse, with the sides shorter when compared with the median line; the head is relatively smaller than in *vitrina*, the antennæ shorter, less setose, with shorter fourth and fifth joints and broader outer joints and the two pronotal punctures before the middle, well developed in *vitrina*, are apparently obsolete.

Gyrophæna criddlei n. sp.—Rather stout, fusoid, moderately convex, shining though with the micro-reticulation evident; color pale, the head blackish, the pronotum gradually clouded medially, the elytra blackish toward the external angles, the abdomen feebly clouded medially and subposteriorly; head transverse, four-fifths as wide as the prothorax, with a few large but shallow scattered punctures at each side of the front, the eyes very prominent, the tempora nearly half as long; antennæ pale, gradually very feebly infuscate distally, rather long, slender basally, joints five and following forming a much stouter parallel loose club, the third much shorter than the second, constricted basally, fourth but little thicker, wider than long, five to ten fully as long as wide or a little longer, the last but little more than one-half longer than the tenth; prothorax feebly obtrapezoidal, nearly one-half wider than long, widest and with the sides rather broadly rounded at about two-fifths from the apex, the punctures rather small and shallow, the post-median central pair feeble; elytra parallel, a fourth wider than long, nearly one-half

wider and two-thirds longer than the prothorax, the punctures fine, sparse and feeble, each with a short stiff pale hair; abdomen conical, with feebly arcuate sides, at base evidently narrower than the elytra, finely, feebly punctulate and with rather long stiff hairs, the fifth tergite (♂) with a feeble, transversely arcuate tumidity evidently before the apical margin, the sixth with a deep transverse emargination in rather more than median third, the sides of the emargination very acute and directed obliquely toward the median line, the bottom with two very small acute spiniform teeth. Length 1.72 mm.; width 0.68 mm. Manitoba (Aweme),—Norman Criddle.

Allied to *laurana* and with nearly similar sexual characters, though the two minute teeth at the bottom of the sixth tergitic emargination of the male, are much more widely separated; but it has rather longer, more slender antennæ, less strongly obtrapezoidal prothorax and somewhat more prominent eyes.

Gyrophæna keeni n. sp.—Larger and still stouter, shining though with distinct and rather large micro-reticulation, piceous-black, the prothorax but little paler, the elytra pale, blackish on the flanks and at the hind angles, the abdomen still paler, the fourth tergite and adjacent regions black; head transverse, barely narrower than the prothorax, with the usual scattered punctures, the eyes prominent, the tempora about a third as long; antennæ pale, the stouter part feebly infumate as in the preceding but shorter, the joints five to ten distinctly wider than long, the last about as long as the two preceding; prothorax three-fifths wider than long, subparallel, the sides rounding rapidly at apex; surface feebly reflexed along the moderately arcuate base, the punctures widely scattered, not conspicuous, the post-median pair distinct; elytra transverse, much shorter than in the preceding, parallel, fully one-half wider but rather less than one-half longer than the prothorax, the humeri widely exposed but rounded, the punctures shallow, sparse and small; abdomen evidently narrower than the elytra, subparallel, the fifth tergite but little narrower than the base, the punctures fine, rather sparse, each with a stiff hair as on the elytra, the fifth tergite (♂) with four small tumidities near the apex medially, the two lateral cariniform, the two median rounded, the sixth subtransverse at apex, with a long slender process near each side, projecting obliquely inward, and with two slender median processes, which do not project posteriorly as far as the lateral. Length 2.0 mm.; width 0.72–0.75 mm. British Columbia (Metlakatla), —Keen.

May be placed near *tenebrosa* Csy., but larger, with broader and more parallel abdomen, and with the two median tumidities of the fifth male tergite rounded and not cariniform; there are also numerous other differences.

Placusa Erichs.

The body in this genus is relatively broad and strongly depressed, with obscure coloration as a rule, but in some forms, such as the European *infima* Er., it becomes very sensibly convex; the male sexual characters at the abdominal apex are generally as pronounced as those of *Gyrophæna*. There are numerous species belonging to the fauna of North America in addition to *tacomæ* Csy., from Washington State; the four following have the prothorax fully as wide as the base of the elytra or wider as in *tacomæ* and *complanata:*

Placusa frosti n. sp.—Depressed, blacki h-piceous, the head and abdomen deeper black, the elytra feebly pallescent, the legs pale; surface dull and finely, densely, asperately punctate, less densely but asperately —though gradually very finely, sparsely and smoothly so posteriorly —on the more shining abdomen; pubescence obscure, very short, loosely fimbriate along the tergitical apices; head small, transverse, not three-fifths as wide as the prothorax, the eyes moderate, not very convex; antennæ blackish, short, rather slender, gradually though very moderately incrassate, the third joint shorter than the second, the fourth very little, the tenth fully four-fifths, wider than long, the last but little longer than wide, very obtuse at tip, as long as the two preceding; prothorax fully twice as wide as long, the sides rounded, gradually more converging anteriorly, widest behind the middle, the base rounded, the apex truncate; surface with a large, broad and very shallow indentation medially, not extending much before the middle; elytra transverse, with feebly diverging sides, at base distinctly narrower than the prothorax, at apex as wide as the latter, the suture two-fifths longer; abdomen long, gradually and moderately tapering, with straight sides, at base slightly narrower than the elytra, the sixth tergite (♂) with a very long slender and feebly arcuate, inwardly oblique, porrect spine at each side of the apex, the median part of the surface at apex tumid and gradually flexed upward, forming a strong dorsal lobe, with its elevated tip narrowly truncate. Length 1.8–2.25 mm.; width 0.5–0.65 mm. Massachusetts (Framingham),—C. A. Frost. Found in Scolytid galleries.

Belongs to the *complanata* group, but differs much from that species in its shorter elytra, long and nearly straight sides of the posteriorly much less punctate abdomen, very much smaller head and in numerous other characters; it is more nearly allied to *tacomæ*, differing in its much smaller head, less punctate abdomen, and, most decidedly, in the nature of the male sexual characters.

Placusa arizonica n. sp.—Narrower, depressed, dull, finely and densely, asperulately punctate, the abdomen more finely and sparsely so and rather strongly shining; color piceous, the entire abdomen paler, the legs pale; pubescence very short and inconspicuous; head transverse,

moderate, two-thirds as wide as the prothorax, rounded at the sides, the eyes at two-thirds their length from the base; antennæ piceous, short, gradually and moderately incrassate, the third joint much shorter than the second, fourth to tenth mutually subsimilar though increasing, all strongly transverse, the last very obtuse, fully as long as the two preceding; prothorax not quite twice as wide as long, nearly parallel and widest at the middle, the sides strongly, subevenly rounded, the apex but little narrower than the base; surface scarcely at all modified, though very faintly impressed transversely before the scutellum; elytra only moderately transverse, with rather strongly diverging sides, at base equal in width to the prothorax, at apex evidently wider, the suture about one-half longer; abdomen rather long, slightly narrower than the elytra, feebly tapering, the sixth tergite (♂) arcuate and nearly simple at tip, with a very acute, inwardly directed and relatively rather small spine at each side, the surface medially only very feebly and narrowly swollen at apex. Length 2.0 mm.; width 0.6 mm. Arizona (Williams),—Wickham.

Differs from the preceding in its still shorter antennæ, larger head, more parallel and relatively less dilated prothorax and in the male sexual characters. The single type before me is not mature, the abdomen being somewhat distorted in drying.

Placusa strata n. sp.—Broad, feebly convex, dull, finely, asperately and densely punctate, the abdomen almost equally densely but more feebly and unevenly asperulate, also with larger granules widely dispersed; pubescence short, palish, dense and distinct; color piceous-black, the elytra dusky-flavescent, the base and external apical parts blackish, the legs pale, the femora piceous; head moderate, wider than long, two-thirds as wide as the prothorax, the eyes large, moderately prominent, the tempora obsolescent; antennæ blackish, only moderately short, slender basally, the third joint shorter than the second, fourth but little thicker, slightly wider than long, four to six rather rapidly wider, six to the tip forming a parallel-sided and rather thick part having the joints strongly transverse, the last parallel, very obtuse, fully as long as the two preceding; prothorax four-fifths wider than long, widest at base, the sides thence distinctly converging and subevenly, moderately arcuate to the apex, the base rounded, the surface unimpressed; elytra moderately transverse, with feebly diverging sides, at base equal in width to the prothorax, at apex evidently wider, the suture nearly two-fifths longer; abdomen wide, almost as wide as the elytra, just visibly tapering and with very feebly arcuate sides, the fifth tergite much longer than the fourth, the first very feebly impressed at base, the next two unimpressed; basal joint of the hind tarsi notably long. Length 1.9 mm.; width 0.65 mm. California (Sonoma Co.).

This species, which is represented by two females, differs from either of those preceding in having the outer heavy part of the

antennæ parallel and not gradually distally thickened; it has the head much smaller and the prothorax relatively narrower and less inflated than in *complanata* or *tacomæ*, also much more narrowed to the apex.

Placusa turbata n. sp.—Stout, feebly convex and obtusely fusoid, slightly shining, the fine and only feebly asperate punctures separated by three or four times their own width on the pronotum, slightly closer and more asperate on the elytra, finer and feebler but dense and more confused on the abdomen; pubescence short but rather coarse, palish; color black, the elytra dark castaneous-red almost throughout, the legs pale piceous-brown; head small, transverse, scarcely three-fifths as wide as the prothorax, the eyes moderate, not very convex, at two-thirds their length from the base, the tempora strongly arcuate, becoming parallel and as prominent as the eyes behind the latter; antennæ short, black, gradually though but just perceptibly thicker from the fifth joint, third a little shorter and more narrowed basally than the second, fourth distinctly, the outer joints four-fifths, wider than long, all unusually parallel-sided, the last very obtuse, apparently somewhat swollen; prothorax four-fifths wider than long, distinctly and evenly convex, unimpressed except a very faint fine transverse ante-scutellar streak, in outline nearly as in *strata*, except that the sides are much more arcuate, becoming parallel near the base, the apex distinctly narrower than the base; elytra moderately transverse, with strongly diverging straight sides, at base barely as wide as the prothorax, at apex much wider, the suture a third longer; abdomen at base evidently narrower than the elytra, feebly tapering and with barely arcuate sides, the tergites as in the preceding, the sixth (♂) very broadly and feebly sinuato-truncate throughout the width at apex, the lateral angles slightly more than right but not modified; at the middle there is a very obtuse cusp and, at each side of the latter, a very small obtuse tooth; on the disk just behind the middle there are two small approximate tubercles; basal joint of the hind tarsi fully as long as the next three combined. Length 2.1 mm.; width 0.7 mm. British Columbia (Metlakatla),—Keen.

Somewhat resembles the preceding but differs decidedly in sculpture and in the more arcuate sides of the prothorax; also in the smaller eyes, with much less retracted tempora.

Placusa petulans n. sp.—Narrower, feebly convex, rather dull, finely, closely, asperately punctate, the abdomen more finely but closely, less asperately and evenly so throughout and more shining; pubescence short; color piceous, the legs pale; head but slightly transverse, fully two-thirds as wide as the prothorax, the eyes large, rather prominent, at a third their length from the base, the tempora much less prominent and rapidly arcuato-converging to the base; antennæ piceous, notably short, rapidly incrassate from the fourth to sixth joints, thence more parallel to the tip, the third much shorter and thinner than the first, rather constricted at base, fourth transverse, the tenth three-fourths wider than long, the

last ogival and nearly as long as the two preceding; prothorax less developed than in any of the preceding, four-fifths wider than long, widest scarcely behind the middle, the sides rather strongly arcuate, more converging anteriorly, the apex distinctly narrower than the base; median line very feebly impressed, ending in a large shallow transversely oval ante-scutellar indentation; elytra moderately transverse, with straight diverging sides, at base slightly wider than any part of the prothorax, at apex still much wider, the suture two-fifths longer; abdomen distinctly narrower than the elytra, parallel, narrowing very slightly at tip, the first three tergites feebly and rather finely impressed at base. Length, 1.8 mm.; width 0.47 mm. California (Hydesville, Valley of Eel River, Humboldt Co.).

The single female serving as the type of this species, seems to be slightly immature though not at all distorted on drying; the basal joint of the hind tarsi is not quite so long as the next three combined.

Placusa vaga n. sp.—Rather broad, depressed and alutaceous, finely, closely and asperulately punctate, the pronotal punctures separated by rather more than twice their own width, the abdomen more finely but otherwise almost similarly punctate, the pubescence short; color black, the elytra just visibly picescent, the legs piceous; head moderate, slightly transverse, nearly three-fourths as wide as the prothorax, the eyes rather small, moderately convex, at three-fourths their length from the base, the tempora about as prominent and strongly rounded just behind the eyes, then rapidly converging to the base; antennæ black, moderately short, the outer part slightly incrassate, the third joint much shorter than the second and thinner, fourth nearly as long as wide, four to seven increasing rather rapidly, the last five subequally wide and rather thick, the tenth more than one-half wider than long on the compressed side, the last obtuse, as long as the two preceding; prothorax four-fifths wider than long, widest somewhat before the middle, subparallel, the sides rather strongly rounded, the apex not evidently narrower than the base, the surface barely at all and very suffusedly impressed at base; elytra large, feebly transverse, with slightly diverging straight sides, at base fully a sixth wider than the prothorax, the suture three-fifths longer, the humeri evidently exposed at base; abdomen broad, slightly narrower than the elytra, parallel, the margins rather wide and feebly arcuate externally, the tergites not impressed except the first, which is feebly so, the fifth much longer than the fourth; basal joint of the hind tarsi barely as long as the next two combined. Length 1.7 mm.; width 0.55 mm. California (Sta. Cruz Mts.).

This species is aberrant, when compared with any of the preceding, in its exposed elytral humeri, relatively more developed elytra and less elongate basal joint of the hind tarsi; it is however a *Placusa*, so far as can be determined at present, and is represented by a single female.

Silusa Erichs.

The species hitherto assigned to *Silusa* in this country are rather heterogeneous and may require some division into groups of at least subgeneric value; *decolorata* and *vesperis*, for example, are each quite dissimilar in facies from *californica* and *valens*, and in different directions.

Silusa rutilans n. sp.—Parallel, convex, pale brownish-rufous throughout, the fourth tergite black, the legs pale testaceous; lustre subalutaceous, the elytra and abdomen more shining; pubescence abundant, pale and stiff; head rather large, closely, shallowly punctate, moderately transverse, convex, fully three-fourths as wide as the prothorax, the eyes rather small, not prominent, at almost their own length from the base, the tempora very gradually arcuato-converging thence to the base; antennæ moderately long, gradually and rapidly becoming very stout apically, pale, the first three joints slender, just visibly and regularly decreasing in length, fourth nearly as long as wide, obtrapezoidal, the tenth three-fourths wider than long, the last ogival, fully as long as the two preceding; prothorax two-fifths wider than long, convex, widest before the middle but with the sides broadly rounded, becoming perceptibly converging and sinuate near the very distinct basal angles, unimpressed, the ground sculpture coarse and irregular, the punctures granuliform and moderately close; elytra parallel, slightly transverse, coarsely, closely and strongly asperate, just visibly wider and a third longer than the prothorax, the apices deeply sinuate laterally; abdomen parallel, rather thick, distinctly narrower than the elytra, strongly and rather closely asperate basally but becoming more sparsely so apically, the three very deep subequal basal impressions simply and not densely punctate; all the tergites subequal in length; basal joint of the hind tarsi one-half longer than the second, the fifth as long as the first two, the claws rather long and feebly arcuate. Length 2.2 mm.; width 0.57 mm. Pennsylvania (suburbs of Philadelphia).

Recognizable by the subparallel and rather convex form, gradually very stout and somewhat compact antennæ, coloration and sculpture.

Silusa modica n. sp.—Parallel, less convex and darker, slightly blackish, the pronotum paler laterally, the abdomen red-brown, the fourth tergite black, the legs pale; sculpture nearly similar, except that the pronotal granules are feebler, less well defined or more confused with the irregular ground sculpture, the pubescence nearly similar; head nearly similar but with larger eyes, they being at but little more than half their length from the base, the tempora feebly converging and arcuate to the base; antennæ similar but rather looser and not quite so thick distally, the last joint longer than the two preceding; prothorax distinctly shorter and more transverse, less convex, three-fifths wider than long, widest at less than two-fifths from the apex, where the sides are broadly subangu-

late, thence more decidedly converging posteriorly, becoming feebly sinuate before the distinct basal angles, the surface unimpressed; elytra nearly similar in form and sculpture but not at all wider than the prothorax, the suture two-fifths longer; abdomen parallel, only very little narrower than the elytra, the fifth tergite (♂) with a small and feebly elevated elongate tubercle just behind the centre, the sixth evenly sinuato-truncate and serrulate at apex, the serrules increasing slightly and gradually in size laterally. Length 2.4 mm.; width 0.55 mm. Iowa (Cedar Rapids),—Brendel.

Closely allied to the preceding but differing in its shorter and broader prothorax, which is not at all narrower than the elytra, in its relatively somewhat broader abdomen and in the evidently slighter convexity of the upper surface.

Silusa senescans n. sp.—Stouter, only moderately convex, parallel, black or piceous-black, the elytra only very slightly paler, the legs pale luteo-piceous; lustre dull, the ground sculpture fine but strong, regular, the punctures sparser and shallow on the head, fine, asperate and rather close on the pronotum, larger, close and asperate but not coarse on the elytra, fine, close and asperate on the slightly more shining abdomen, a little sparser posteriorly, the three impressions scarcely at all punctate and distinctly decreasing in depth, the third very moderate; pubescence abundant, coarse and pale, yellowish; head distinctly transverse, two-thirds as wide as the prothorax, the eyes moderate, rather prominent, at two-thirds their length from the base, the tempora moderately converging and feebly arcuate to the base; antennæ black, piceous basally, moderate in length, thick except basally, the third joint a little longer than the second and almost as long as the first, fourth transversely obtrapezoidal, not much thicker, fifth abruptly much thicker and thence increasing feebly to the tip, the tenth twice as wide as long, the last rather acutely ogival, somewhat longer than the two preceding; prothorax not quite twice as wide as long, parallel, widest at the middle, the sides evenly and strongly arcüate, the basal angles obtuse and slightly blunt, the surface with a feeble transverse ante-scutellar impression; elytra but slightly transverse, subparallel, scarcely visibly wider, the suture two-fifths longer, than the prothorax, the apical sinuses small but rather deep; abdomen not quite so wide as the elytra, parallel and straight at the sides, the first five tergites equal in length; basal joint of the hind tarsi scarcely one-half longer than the second, two to four equal and together equal to the fifth. Length 2.65 mm. width 0.7 mm. Iowa (Cedar Rapids),—Brendel.

Quite different from either of the two preceding in coloration, antennal structure, form of the prothorax and in many other features; the type is a female.

Homalota Mann.

Epipeda Rey.

The depressed surface characterizing the species of *Homalota*, is suggestive of *Placusa*, but the body is slender and linear in form and the type of male sexual characters is wholly different, though likewise very pronounced. There are many species in our fauna and possibly some one of them may be identical with the European *plana* Gyll., examples of which I have tried in vain to obtain; the multiplicity of species would, however, tend to show that no one of them can be exactly the same as *plana;* but, if really described below, the synonymy can easily be announced by those in position to decide.

Homalota funesta n. sp.—Moderately slender, parallel, very depressed, black, the elytra obscure testaceous, triangularly infumate basally, the legs pale; lustre dull, the micro-reticulation small but very strong, larger and feebler on the elytra and abdomen, the latter more shining; punctures close but obscure, fine, asperate and dense on the elytra and abdomen, sparser on the latter posteriorly, the four basal impressions smooth; pubescence rather long, coarse and pale, yellowish; head slightly wider than long, nearly five-sixths as wide as the prothorax, the eyes prominent, at their own length from the base, the tempora rapidly rounded, becoming parallel behind the eyes and distinctly less prominent than the latter; antennæ rather long, black, piceous basally, the third joint shorter and narrower than the second, fourth not thicker, as long as wide, fifth and following abruptly and mutually subequally thick, the tenth a third wider than long, the last elongate-oval, as long as the two preceding; prothorax nearly one-half wider than long, widest at or barely before the middle, where the sides are broadly angulate, thence very feebly converging to the apex, which is fully as wide as the base, and rather more strongly converging posteriorly, becoming sinuate before the slightly everted basal angles; surface broadly flattened medially; elytra nearly as long as wide, parallel, just visibly wider, the suture nearly one-half longer, than the prothorax, the apices transverse, not at all sinuate; abdomen long, parallel, with rather wide margins, slightly narrower than the elytra, the fifth tergite as long as the fourth, the sixth (♂) truncate, the truncature limited laterally by feeble projections, the entire surface flat, rugose and depressed below the sides, being limited laterally by longitudinal, entire and slightly arcuate vertical walls. Length 2.3–2.8 mm.; width 0.5–0.58 mm. Ohio (Cincinnati), —Dury.

Probably closely related to *plana* but also closely related to the following, though altogether different:

Homalota flexibilis n. sp.—Less parallel, depressed, dull, the elytra

slightly, the abdomen rather strongly, shining; sculpture, punctures and coloration nearly as in the preceding, the pubescence rather long and bristling; head slightly wider than long, four-fifths as wide as the prothorax, the eyes moderately prominent, at slightly more than their own length from the base, the tempora moderately converging and evenly, not strongly arcuate to the base; antennæ rather long, black, piceous basally, moderately slender apically, the third joint shorter and more basally constricted than the second, fourth thicker, obtrapezoidal, not quite as long as wide, four to six very slowly and evenly increasing, thence parallel to the tip, the tenth barely at all wider than long, the last acutely ogival, not quite so long as the two preceding; prothorax not over a third wider than long, widest at about two-fifths from the apex, the sides very broadly, evenly rounded, becoming slightly convergent anteriorly and rather strongly convergent but still arcuate to the very minutely and feebly subprominent, though obtuse, basal angles, the apex somewhat wider than the base, the surface very broadly flattened or feebly impressed medially; elytra parallel, as long as wide, fully a fifth wider, the suture two-fifths longer, than the prothorax, the humeri distinctly exposed at base; abdomen long, parallel, evidently narrower than the elytra, the fourth impression fine and feeble, the sexual characters (♂) nearly as in *funesta*. Length 2.3–2.8 mm.; width 0.44–0.55 mm. Pennsylvania (Allegheny),—Hamilton.

Distinguishable from the preceding by the antennal structure, the fifth joint not being abruptly wider than the fourth, by its much narrower and differently outlined prothorax, longer elytra and other characters.

Homalota hesperica n. sp.—More slender, depressed, dull, the abdomen shining, the sculpture nearly as in the two preceding but rather finer and smoother; color dark piceous-brown, the head and abdomen black, the legs paler brown, the elytra barely visibly paler than the prothorax; pubescence very short, palish but not conspicuous; head but little wider than long, almost as wide as the prothorax, the eyes prominent, at their own length from the base, the tempora evidently less prominent, parallel for some distance, then strongly rounding to the base; antennæ piceous, rather stout, shorter, as long as the head and prothorax, the third joint shorter and more constricted basally than the second, fourth scarcely thicker, wider than long, nearly parallel, fifth abruptly thicker, the joints thence distinctly increasing in thickness to the tip, the tenth three-fourths wider than long, the last not quite so long as the two preceding; prothorax only a fifth wider than long, widest near two-fifths from the apex, where the sides are very obtusely and feebly subangulate, converging very slightly to the apex and more distinctly and also becoming straight to the base, the angles obtuse, not very sharp and not in the least prominent or everted, the surface feebly impressed along the median line from apex to base, the latter scarcely as wide as the apex, broadly and moderately rounded as usual; elytra fully as long as wide, with very slightly diverging straight sides, at base fully a fourth wider, the suture one-half

longer, than the prothorax; abdomen parallel, with straight sides, much narrower than the elytra, the four impressions rather feeble, the fifth tergite (♂) with an elongate tubercle just behind the centre, the sixth with the depression nearly as in the two preceding, except that the arcuato-truncate apex is not defined by small lateral projections and the lateral limits of the flat depressed area are not so abruptly defined. Length 2.2 mm., width 0.48 mm. California (Hydesville, Valley of Eel River, Humboldt Co.).

To be known at once from either of the two preceding by the finer sculpture and pubescence, coloration, narrower prothorax, still longer elytra, more parallel tempora and by the male sexual characters, there being no discal tubercle of the fifth tergite in the male of those species.

Homalota wickhami n. sp.—Slender, depressed, dull, black, the elytra and legs brown, the former feebly infumate basally, the abdomen pallescent at apex; punctures small, feeble and confused, indistinct, evident though shallow and narrowly parted along the middle on the head, fine, asperulate and moderately close on the shining abdomen, becoming very fine and sparse posterior to about the middle; pubescence rather fine, short and inconspicuous; head large, fully as wide as the prothorax, but little wider than long, the eyes very prominent, at their own length from the base, the tempora much less prominent, parallel for a very short distance, then oblique to the base; antennæ black, piceous basally, moderately long and not stout, the third joint scarcely shorter than the second but more constricted basally, fourth nearly as long as wide. fifth rather abruptly thicker, one-third, the tenth one-half, wider than long, subequally wide, the last elongate-ogival, as long as the two preceding; prothorax very slightly wider than long, widest anteriorly though indefinitely, the sides evenly and very broadly rounded, more converging basally, sinuate just before the obtusely prominent basal angles, the apex somewhat wider than the base, the surface very broadly and feebly impressed along the middle throughout; elytra not quite so long as wide, with very feebly diverging sides, at base a fourth wider, the suture two-fifths longer, than the prothorax, the humeri well exposed at base; abdomen parallel, with straight sides, long, much narrower than the elytra, the four basal impressions distinct. Length 2.6 mm.; width 0.46 mm. Iowa (Iowa City),—Wickham.

The female type represents a species allied to *flexibilis* but smaller, notably more slender and with a relatively larger head and narrower prothorax and abdomen.

Homalota frigidula n. sp.—Similar to the preceding in coloration and sculpture, except that the elytra are not so definitely pale and the abdomen not pale at tip, the vestiture rather longer and more distinct; head large though barely as wide as the prothorax, scarcely at all wider than long, the eyes smaller and not so prominent, at fully one-half more than

their own length from the base, the tempora less prominent, long, arcuate and but feebly converging to the base; antennæ a little shorter and more gradually thicker distally to the tip, the third joint barely shorter but thinner and more constricted basally than the second, fourth slightly wider than long, fifth rather abruptly wider, transverse, tenth almost twice as wide as long, the last but little longer than wide, very obtuse, as long as the two preceding; prothorax nearly as in the preceding throughout, though relatively smaller and with the basal angles obtuse and not or scarcely at all prominent externally; elytra large, nearly as long as wide, with sensibly diverging sides, at base more than a fourth wider, the suture one-half longer, than the prothorax; abdomen narrow, parallel, with very feebly arcuate sides, much narrower than the elytra, the four impressions distinct but gradually diminishing as usual, the fifth tergite one-half longer than the fourth. Length 1.8 mm.; width 0.4 mm. Idaho (Cœur d'Alene),—Wickham.

This species is also represented before me by a single female; it is allied to *wickhami* but differs in its much smaller size, smaller eyes, relatively larger elytra, narrower abdomen and somewhat in coloration and antennal structure.

Homalota humilis n. sp.—Slender, subparallel, depressed, distinctly shining, piceous, the elytra slightly paler, the head and abdomen black, the latter not paler at apex, the legs pale piceous; punctures of the head rather small but distinct, of the pronotum fine and indistinct, of the elytra fine, distinct and asperulate, rather close, of the abdomen very fine and remote, closer basally; pubescence short; head as long as wide, not quite as wide as the prothorax, the eyes well developed, rather prominent, at a little more than their own length from the base, the tempora slightly less prominent, parallel for a long distance, then rounded to the base; front broadly, feebly concave; antennæ a little longer than the head and prothorax, piceous-brown throughout, the third joint slightly shorter and more basally constricted than the second, both much shorter than the first, fourth slightly wider than long, four to six increasing rather rapidly, six to the tip very gradually but very moderately thicker, the tenth fully one-half wider than long, the last subcylindric, very obtuse at tip and as long as the two preceding; prothorax a fourth wider than long, widest well before the middle, the sides broadly rounded, converging and straight basally, the angles obtuse and rather blunt, not at all prominent, the surface broadly impressed medially behind the centre; elytra slightly shorter than wide, with feebly diverging sides, at base a fourth wider, the suture nearly one-half longer, than the prothorax; abdomen parallel, much narrower than the elytra, the fourth impression much finer and feebler than the others, the fifth tergite longer than the fourth, the sixth (♀) broadly rounded at apex, becoming sinuate medially, its surface asperate. Length 1.9 mm.; width 0.4 mm. New York (Catskill Mts.).

To be known by its very small size, more shining surface, feebly

concave front and basally impressed pronotum, among other features.

Homalota lepidula n. sp.—Slender and subparallel but not quite as depressed as usual, alutaceous, blackish-piceous, the elytra a little paler, dark brown, blackish basally, the head and abdomen black, the legs dark brown; punctures fine and indistinct, a little less so on the head as usual, fine and sparse on the more shining abdomen but denser basally; pubescence not conspicuous; head and antennæ throughout nearly as in *humilis*, except that the former is only about three-fourths as wide as the prothorax, with the front wholly unimpressed; prothorax larger and less depressed than usual, fully a third wider than long, the outline nearly as in the preceding, except that the sides posteriorly are only very feebly convergent, barely becoming straight basally, the angles obtuse and slightly rounded, not in the least prominent, the surface very faintly impressed at base medially; elytra almost as long as wide, with feebly diverging sides, the humeral parts unusually prominent longitudinally above the flanks, at base only very little wider, the suture two-fifths longer, than the prothorax; abdomen linear, narrow, very much narrower than the elytra, the four impressions moderate and gradually feebler, the fifth (♂) fully one-half longer than the fourth and with a small and very feeble longitudinal tumidity at the hind margin medially, the sixth with its flat surface depressed below the sides, from which it is separated by thin elevated cariniform walls, which curve inward posteriorly, their slightly prominent apices limiting laterally the somewhat narrowly truncate and but finely and feebly reflexed apex of the segment, the flat surface with the elongate asperities unusually thin, carinuliform and well separated. Length 1.85 mm.; width 0.38 mm. Texas (Houston).

A very small species, allied somewhat to the much larger *funesta* and *flexibilis* in the general nature of the sexual characters, but differing in the more feeble basal narrowing of the prothorax, with the angles obtusely blunt or slightly rounded and not at all prominent or everted, as they are in those species; also in having a feeble apical carinule on the fifth tergite of the male and in the rather less depressed upper surface of the head and prothorax.

Amenusa Csy.

With a general external facies strongly recalling *Homalota*, this genus differs radically in having the middle coxæ widely separated, the long flat truncate metasternal projection abutting closely against the broad apex of the mesosternal process; also in having only three of the abdominal tergites impressed at base. The surface of the body is less depressed, although the dense sculpture and the coloration are almost similar. Mr. Fall sent me many years ago

two specimens that he had collected at Pomona, one on Feb. 2, 1896, and the other on Feb. 3, of the same year, they were therefore probably not taken at the same spot; one of them is a male, originally described by me as the type of the genus; the other is a female and was therefore considered at that time as belonging to *angustula*. Closer observation of this female, however, indicates that it can not be specifically identical with *angustula;* it is described as follows:

Amenusa spissula n. sp.—Much stouter than *angustula*, though resembling it throughout in coloration, sculpture and pubescence, also in the sternal characters; surface dull, the elytra slightly, the abdomen much more, shining, moderately stout in form, subparallel; head larger, wider than long, almost five-sixths as wide as the prothorax, the eyes a little larger and less distant from the base, not very prominent, the tempora about three-fourths as long as the eyes and slightly less prominent, feebly converging and evenly arcuate to the base; antennæ extending to basal third of the elytra, gradually and strongly incrassate, blackish, the third joint shorter than the second, both much shorter than the first, fourth not much thicker, slightly transverse, the fifth larger but not very abruptly, five to the tip gradually wider, the tenth two-thirds wider than long, the last subpyriform, as long as the two preceding; prothorax about two-fifths wider than long, widest at apical third, where the sides are rather broadly rounded, thence distinctly converging and straight to the obtuse and blunt basal angles, the surface only very obsoletely modified before the scutellum; elytra moderately transverse, at base a fifth wider, the suture two-fifths longer, than the prothorax, the apices very broadly and feebly sinuate laterally; abdomen parallel, distinctly narrower than the elytra, the fifth tergite barely as long as the fourth; surface very finely, rather sparsely punctate, more closely basally. Length 2.7 mm.; width 0.7 mm. California (Pomona, Los Angeles Co.).

Differs from *angustula* in its much stouter form, relatively larger head and eyes and especially in the form of the antennæ, which gradually and rather rapidly become notably stout apically; in *angustula* they are much thinner and are more nearly parallel from the fifth joint to the tip; the prothorax also is larger and less transverse than in *angustula*.

Pectusa n. gen.

Body short, moderately convex, the infra-lateral cephalic carinæ very fine but entire, the hypomera flat, moderately inflexed and visible from the sides, the elytral apices not or scarcely at all sinuate laterally; first three abdominal tergites finely and only very feebly impressed at base, the third not distinctly, the fifth much

shorter than the fourth. Middle coxæ very widely separated, the mesosternal process scarcely extending to their middle, where its broad apex abuts closely in a transverse suture against the broad apical truncature of the long flat metasternal projection. First four joints of the hind tarsi subequal, the fifth relatively very long.

Neither this genus, *Amenusa* nor *Apheloglossa*, which belongs to this group of genera, seems to have any close European relatives and they are undoubtedly peculiar to the American fauna; they are probably not in their correct systematic position in the present statement, but should possibly be placed closer to the Gyrophænid series, though, in habitus, they bear no resemblance whatever to the latter.

The following is the type of *Pectusa* and the only species now known:

Pectusa oblonga n. sp.—Short, stout, parallel, distinctly convex, rather shining though very finely and closely punctured, somewhat asperulately on the elytra, the abdomen with fine and moderately close punctulation throughout; color black, the elytra dark brown, blackish basally and postero-externally, the legs piceous in great part; pubescence short, palish but inconspicuous; head large, rather transverse, almost four-fifths as wide as the prothorax, the eyes large but not very prominent, at barely half their own length from the base, the tempora rapidly converging and arcuate to the very broad base; antennæ rather short, but little longer than the head and prothorax, black, scarcely piceous basally, gradually becoming very thick distally, the third joint shorter and thinner than the first, fourth but little thicker, slightly transverse, fifth larger but not very abruptly, the tenth twice as wide as long, the last conical, longer than the two preceding; prothorax fully two-thirds wider than long, widest near apical third, where the sides are rather broadly rounded, thence feebly converging, becoming straight, to the obtuse but distinct basal angles, the surface very feebly transversely impressed before the scutellum; elytra strongly transverse, with just visibly diverging sides, at base very slightly wider, the suture barely a fourth longer, than the prothorax; abdomen short and broad, almost as wide as the elytra, parallel, with feebly arcuate sides and well developed margins, the surface transversely and moderately convex. Length 1.7 mm.; width 0.55 mm. Mississippi (Vicksburg).

To be known readily by its short, compact and subparallel form, coloration, gradually very incrassate antennæ and well developed eyes. The single type is probably female, though indeterminate, since the portion of the abdomen behind the fifth segment is strongly retracted.

Leptusa Kr.

This genus in its proper sense is moderately developed in America but in all probability more so than in the European fauna. The genus, as here considered, is restricted to the typical *Leptusa*, of Kraatz, and does not include either *Pasilia* or *Pachygluta* as subgenera, those groups being apparently entitled to generic rank as held by Rey. *Leptusa opaca* Csy., seems to be a widely distributed species, as there are examples in my collection not only from the suburbs of Philadelphia, but from Rhode Island and Wisconsin; also from the Blue Ridge of Franklin Co., Penn.

In his recent publication on the Coleoptera of Indiana, Mr. W. S. Blatchley gives descriptions of a number of new species of Aleocharinæ, which, because of brevity and the omission of many of the more important structural characters, are in most cases useless for purposes of identification. Among them are two species assigned to *Leptusa*, whether properly or not cannot be determined, but the few outline characters given indicate forms that are not represented in my cabinet—at any rate under *Leptusa*.[1]

Leptusa nebulosa n. sp.—Form rather shorter and broader than in *tricolor* Csy., similarly convex but a little less opaque anteriorly; color piceo-rufous, the abdomen somewhat brighter testaceous, with the fourth and basal part of the fifth tergite black, the legs moderately pale; anterior parts finely, densely and obscurely punctate, the elytra strongly and asperately, the abdomen also very strongly but less closely asperate, the concave impressions strongly, simply and loosely punctate; pubescence short, inconspicuous; head slightly wider than long, two-thirds as wide as the prothorax, the eyes moderate, at nearly their own length from the base, scarcely prominent; antennæ nearly as in *tricolor*, blackish, pale at apex and toward base, gradually and strongly incrassate distally, the third joint rather longer than the second, fourth obtrapezoidal and as long as wide, tenth about twice as wide as long, the last obtusely ogival, rather longer than the two preceding; prothorax fully two-thirds

[1] Mr. Blatchley in the introduction to this voluminous and on the whole undoubtedly useful work (p. 5, foot-note), makes some allusion to an apparent indisposition on my part to help him in his identifications. If I had known that Mr. Blatchley intended to publish my letters to him, in such a way as to hold me before the public in what could only be considered an unfavorable light, I would certainly have elaborated my replies, in such manner as to show more clearly how impossible it was for me to comply with his requests at that time. In future I shall have my collections at hand in their entirety, and it will give me great pleasure to identify material for correspondents, provided only that, in groups of obscure forms, it be mounted with reasonable neatness and be to some extent segregated into species, showing that the sender has tried to observe and study for himself so far as practicable.

wider than long, widest slightly before the middle, where the sides are rather broadly rounded, thence feebly converging, becoming straight, to the obtuse but very sharply defined basal angles, the surface with no more than feeblest trace of a transverse ante-scutellar impression; elytra evidently shorter than wide, parallel, only just visibly wider, the suture fully two-fifths longer, than the prothorax, the apical sinuses feeble; abdomen parallel, with thick margins, almost as wide as the elytra. Length 2.5 mm.; width 0.6 mm. Ohio (Cincinnati),—Dury.

Allied rather closely to *tricolor* Csy., (=*caseyi* Fenyes,—*tricolor* not being a preoccupied name in *Leptusa*, the *tricolor* of Scriba belonging to *Pasilia*, which should be considered a genus distinct from *Leptusa*), but differing in its less dense sculpture of the anterior parts, slightly shorter antennal joints throughout, the outer joints being decidedly shorter and more transverse, in the sides of the prothorax being less prominent before the middle and thence less converging basally, in the much shallower sinuses at the elytral apices and in other characters of importance; the sex of the type is undetermined. This species was confounded with *tricolor* Csy., under my original description of the latter.

Leptusa iowensis n. sp.—Form and sculpture nearly as in *tricolor* but much narrower and a little more shining, pale red-brown in color, the abdomen not paler but more rufous, the fourth tergite very feebly clouded, the legs pale; punctures of the head rather large but feeble, close, of the pronotum fine, dense and confused, asperulate, of the elytra rather coarsely asperate, close, of the more shining abdomen fine, asperate and rather close though becoming sparser posteriorly, the deep concave impressions as in the preceding and *tricolor;* head nearly as long as wide, almost three-fourths as wide as the prothorax, the eyes small, prominent, at rather more than their own length from the base, the tempora long, gradually converging and arcuate behind them; antennæ pale brown, still paler at apex and toward base, extending almost to the middle of the elytra, gradually though only moderately incrassate, the third joint as long as the second but thinner, fourth not quite as long as wide, tenth fully two-thirds wider than long, the last ogival, a little longer than the two preceding; prothorax convex, two-fifths wider than long, widest at two-fifths from the apex, where the sides are broadly rounded, thence distinctly converging, becoming straight, to the obtuse but sharp basal angles, the basal impression almost obsolete; elytra but slightly transverse, scarcely visibly wider, the suture a third longer, than the prothorax, the apical sinuses very deep; abdomen parallel, long, distinctly narrower than the elytra. Length 2.3 mm.; width 0.5 mm. Iowa (Iowa City),—Wickham.

Also allied to *tricolor*, differing in its slightly longer and much less incrassate antennæ, less transverse head, less prominent sides of

the prothorax, shorter pubescence, feebler opacity and distinctly in coloration; from *nebulosa* it differs in its longer and less incrassate antennæ, smaller and more prominent eyes, deep apical sinuses of the elytra, in its narrower abdomen and also strikingly in coloration; the type is a female and is pinned with specimens of a small piceous-black ant.

Leptusa exposita n. sp.—Nearly as in *semirufa* in coloration and sculpture though slightly more slender, the head smaller and not so transverse, nearly as long as wide and but little more than two-thirds as wide as the prothorax, the eyes convex and prominent, at slightly more than their own length from the base, the tempora slightly less prominent, parallel and nearly straight for a long distance, then rapidly and strongly oblique to the base; antennæ nearly as in *semirufa;* prothorax also similar but relatively wider and more transverse; elytra notably shorter, rather transverse, parallel, the sides similarly arcuate, only about a fifth or sixth wider, the suture a fourth longer, than the prothorax, the apical sinuses similarly deep and rather narrow; abdomen more slender, distinctly narrower than the prothorax and very much narrower than the elytra, linear, the fifth tergite at least one-half longer than the fourth. Length 2.2 mm.; width 0.46 mm. Ohio (Cincinn ti),—Dury.

Allied closely to *semirufa* and confounded therewith under my original description (Tr. St. Louis, XVI, p. 352), but differing in its smaller and narrower head, with smaller and notably more prominent eyes, shorter and more transverse prothorax and elytra, the former less distinctly narrower than the latter, and in its narrower abdomen; the sex of the type is probably female.

This *semirufa* section of the genus differs greatly from the *tricolor* section in its smaller antennæ, longer, parallel tempora, more parallel prothorax, and in having the fourth tergite also impressed, though more feebly than the first three, where the impressions are much finer than in *tricolor* and allies; also in having the fifth tergite relatively very much more elongate; it probably constitutes a valid subgeneric group.

Pasilia Rey.

This genus was described by Rey as a subgenus of his *Sipalia;* the latter, proving however to be a Myrmedoniid, must be removed from the present tribe, leaving *Pasilia* as a distinct Bolitocharid genus. It is remarkable for the extreme brevity of the metasternum and, as correlative thereto, the more than usually short elytra, these in *Pasilia* proper being more or less nearly as long as the pro-

thorax; but in the subgenus *Pisalia*—which does not occur at all in North America so far as known, though the largest division of the Leptusæ in Europe—they become extremely short, generally but little more than half as long as the prothorax. The two following species can be assigned to *Pasilia:*

Pasilia virginica n. sp.—Rather slender, parallel, convex and shining, pale brownish-testaceous, the elytra somewhat darker, the head blackish, the fourth tergite wholly black, the legs pale testaceous; punctures of the head rather large and close but shallow, of the pronotum much smaller, shallow and indistinct, rather close, of the elytra larger, less close, strongly asperate, of the abdomen fine, asperulate, numerous but well separated throughout, the three deep and subequal impressions impunctate; pubescence short but rather coarse, pale; head nearly four-fifths as wide as the prothorax, wider than long, evenly oval, the parallel sides strongly and evenly arcuate, the eyes very small, at about the middle of the length, formed of about 22 facets, the carinæ strong and entire; antennæ infumate, gradually pale and strongly incrassate distally, short, the second joint as long as the first, distinctly longer than the third, fourth nearly as long as wide, obtrapezoidal, fourth to tip very regularly and rapidly thicker and more parallel, the tenth twice as wide as long, the last ogival and fully as long as the two preceding; prothorax nearly three-fifths wider than long, strongly convex, with very obsoletely impressed median line throughout, widest near apical third, where the sides are broadly rounded, thence rather strongly convergent and less arcuate to the very obtuse and somewhat blunt basal angles; elytra transverse, with feebly diverging sides, at base not quite, at apex fully, as wide as the prothorax, the suture equal in length to the latter, the apices broadly and moderately sinuate laterally; abdomen parallel, fully as wide as the elytra, the fifth tergite longer than the fourth; middle coxæ narrowly separated, the mesosternal process gradually acute but not finely drawn out, extending beyond their middle, the very free apex moderately distant from the metasternal projection, which is nearly as long as wide, with its apex acutely rounded; hypomera feebly inflexed, flat and fully visible from the sides. Length 1.6 mm.; width 0.38 mm. Virginia (Norfolk).

No sexual characters are clearly observable in three of the examples before me, but in a fourth, which is much paler in color, a little stouter in form and with an evidently larger head, the eyes have nearly twice as many facets, although there are no distinct abdominal modifications; this fourth specimen, which was taken at the same locality, is probably the male; there are no differences other than those mentioned distinguishing it from the type described above.

Sipalia frontalis Csy., described from California (Ann. N. Y.

Acad., VII, p. 366), is our other known species of *Pasilia;* it does not belong to the Myrmedoniid *Sipalia.*

Pachygluta Thoms.

This genus, as represented by its type—*ruficollis* Er.—is closely allied to *Pasilia*, differing in its more developed elytra, posteriorly subinflated abdomen and still very much shorter mesosternal process; also in many minor characters, such as sculpture, the feeble apical sinuses of the elytra and the system of coloration. The European *ruficollis* Er., and *ludyi* Epp., are the only species assignable to it at present; *fuliginosa* Aubé, erroneously assigned to typical *Leptusa* in the recent European catalogue, if correctly represented before me by a Caucasus example sent by Reitter, forms part of the following genus and not *Pachygluta:*

Eucryptusa Csy.

In most of its characters this genus is almost a reproduction of *Leptusa*, but the body is always much more minute in size, shorter and more compact in build, with the prothorax shorter, the elytral sinuses smaller or feebler and the mesosternal process shorter and less finely acuminate, though much longer than in *Pachygluta.* Besides the type—*Silusa nanula* Csy.,—and the species represented by the Caucasus specimen sent to me by Reitter mentioned above, this genus will include the three following species:

Eucryptusa pavida n. sp.—Narrow, moderately convex, somewhat shining, black, the elytra very dark piceo-rufous, the legs pale; microreticulation strong; punctures fine, rather close, subgranular, asperate on the elytra, feebly asperate and numerous on the abdomen, becoming stronger posteriorly; pubescence short but stiff and suberect; head moderate, evidently wider than long, almost three-fourths as wide as the prothorax, the eyes well developed, at two-thirds their length from the base, the less prominent tempora slightly arcuate and moderately converging to the base; antennæ piceous throughout, rather short, gradually and distinctly incrassate distally, the second joint almost as long as the first, longer than the third, fourth about as long as wide, tenth fully twice as wide as long, the last obtuse, not quite as long as the two preceding, joints five to ten with dense coronæ of short palish hairs which also define a similarly outlined basal part of the eleventh joint; prothorax three-fifths wider than long, widest at two-fifths from the apex, where the sides are somewhat prominently rounded, thence rather strongly converging, becoming straight, to the obtuse but distinct basal angles, the

surface with a very feeble transverse impression at some distance before the basal margin; elytra about as long as wide, parallel, with broadly exposed humeri, a fourth wider and two-thirds longer than the prothorax, the apical sinuses narrow but deep; abdomen parallel, slightly narrower than the elytra, the three basal impressions deep. Length 1.7 mm.; width 0.35 mm. New York (near the city).

Recognizable by its small size, rather narrow form and relatively feebly developed head and prothorax. The type is a female.

Eucryptusa immunis n. sp.—Stouter and larger, moderately convex, feebly shining and with strong reticulation anteriorly, the latter obsolete on the much more shining elytra and abdomen; punctures fine, shallow on the head, granuliform on the prothorax, larger and very strongly asperate as the elytra, fine and asperate on the abdomen, close basally, gradually finer and much sparser posteriorly; color black, the elytra barely at all paler, the legs pale brown; pubescence coarse, palish, not erect; head transverse, almost four-fifths as wide as the prothorax, the eyes moderate, at nearly their own length from the base, the tempora arcuate and converging to the base; antennæ black, the two basal joints very pale, a little longer than in the preceding, extending to basal third of the elytra, nearly as in *pavida* but less incrassate distally, the tenth joint one-half wider than long, the last slender, acutely and gradually pointed and fully as long as the two preceding, without the transverse corona, the latter also much less defined on all the outer joints; prothorax in outline nearly as in the preceding but larger and less transverse, about one-half wider than long, with the obtuse basal angles blunter and the surface with a large median area toward base which is very feebly impressed; elytra quadrate, parallel, nearly as long as wide, a fifth wider and one-half longer than the prothorax, the humeri well exposed at base, the apical sinuses broader but shallower than in *pavida;* abdomen nearly similar. Length 1.9 mm.; width 0.45 mm. Iowa (Cedar Rapids),—Brendel.

Distinguishable at once from the preceding by its larger size, stouter form, relatively much more developed head and prothorax and smaller eyes; it also is described from the female.

Nanula Csy., has a relatively smaller head and larger prothorax than either of the preceding.

Eucryptusa fragilis n. sp.—More slender and parallel, less convex, the reticulation strong on the rather dull anterior parts, feebler but distinct on the moderately shining elytra and abdomen, the punctures fine, granuliform and not dense on the pronotum, slightly asperate but fine and well separated on the elytra and still finer on the abdomen, becoming sparse posteriorly; color piceous-black, the elytra and abdominal tip pale brown, the legs very pale; pubescence moderate, not erect; head wider than long, four-fifths as wide as the prothorax, the eyes notably prominent, at fully their own length from the base, the tempora

moderately converging and arcuate; antennæ very pale ochreous throughout, short, gradually and distinctly incrassate, the second joint much shorter than the first and distinctly longer and thicker than the third, fourth wider than long, the tenth more than twice as wide as long, the last obtusely ogival and as long as the two preceding; prothorax nearly three-fourths wider than long, widest near anterior third, where the sides are rather prominently rounded, thence distinctly converging, becoming straight, to the obtuse but well defined basal angles, the transverse ante-basal impression barely traceable; elytra evidently shorter than wide, with the sides just visibly diverging and the humeri only very slightly exposed at base, only as wide as the anterior part of the prothorax, the suture two-thirds longer, the apical sinuses rather small and not deep; abdomen evidently narrower than the elytra, parallel, the first three impressions deep, the fourth tergite also impressed at base but more feebly; mesosternal process very short, rather obtuse, the metasternal projection unusually large, extending to the middle of the coxæ, its very acute apex separated from the process by a moderate though very deep interval. Length 1.4 mm.; width 0.3 mm. California (Hoopa Valley, Humboldt Co.).

This species is at least subgenerically different from the two preceding, as shown by its flatter surface, the relatively more developed basal joint of the differently colored antennæ, by the more prominent eyes, quite different mesosternal structure and in having the fourth tergite impressed at base, though much more feebly than the first three; the abdomen is just visibly and gradually pallescent basally in the single type, which appears to be a female.

Subgenus **Dianusa** Csy.

The prothorax is here broader than in the preceding and sometimes inflated at the sides, with the head relatively less developed, giving a very different habitus; but the general structural characters are nearly the same, so that the propriety of reducing the genus to the status of a subgenus appears to be sufficiently evident. Besides the type—*Dianusa pasadenæ* Csy.,—the following should be made known:

Eucryptusa (**Dianusa**) **bakeri** n. sp.—Oblong, parallel, moderately convex, rather shining, rufo-piceous, the head darker, the elytra notably paler, the abdomen black, gradually pallescent basally and with the tip flavate, the legs very pale; punctures of the head very minute, sparse and feeble, of the pronotum and elytra fine, sparse and only slightly asperate, of the abdomen also feebly asperate, fine and still sparser; pubescence coarse, pale, not erect; head small, much wider than long, parallel, barely two-thirds as wide as the prothorax, the eyes rather small

but prominent, at much more than their own length from the base, the tempora equally prominent, parallel, arcuate, broadly rounding and then strongly converging at base; antennæ moderately short, infuscate, pale and slender basally, rapidly incrassate in about apical half only, the first three joints slowly diminishing in length and thickness, the fourth as long as wide, tenth fully twice as wide as long, obtrapezoidal, the last conoidal and longer than the two preceding; prothorax nearly four-fifths wider than long, widest at the middle, the sides evenly and strongly arcuate throughout, the basal angles very obtuse and rounded, the transverse basal impression obsolescent; elytra much shorter than wide, equal in width to the prothorax and a third longer, the sinuses small and moderate in depth; abdomen rather broad, parallel, almost as wide as the elytra, the three impressions rather fine but distinct. Length 1.5 mm.; width 0.4 mm. California (mountains near Claremont),—Baker.

Readily distinguishable from *pasadenæ*, which inhabits almost the same locality, by its more strongly, more rapidly and more distally incrassate antennæ and very much more strongly rounded sides of the prothorax; there are no sexual marks visible in the type, which is probably a female.

Subgenus **Ulitusa** Csy.

The chief distinction of this group, when compared with either of the two preceding, lies in the remarkable sculpture of very coarse deep rounded punctures; but, as the structural characters do not materially differ, it seems best to regard it as a subgenus for the present. The type is *Ulitusa cribratula* Csy., (Tr. Acad. St. Louis, XVI, p. 348). It was described from near Cincinnati, but last summer I found it under old chestnut bark, on the Blue Ridge at Buena Vista Spring, Penn., together with *Leptusa opaca.*

Crimalia n. gen.

In all of the preceding allies of *Leptusa*, the infra-lateral carinæ of the head are strongly, generally conspicuously developed and always entire, this being one of the most constant features of that group of genera and subgenera; in the minute species for which the above name is suggested, however, there is no vestige of the carinæ at any part of the cephalic flanks. The antennæ are nearly similar, excepting a relatively greater thickness of the two basal joints, the eyes well developed, the hypomera and tarsi as in *Leptusa;* but the mesosternal parts are different, the interval between the moderately long and rather obtusely pointed mesosternal process and the

acutely subangular metasternal projection being very short and wholly undepresssed, the mesosternal point being scarcely at all free. In addition to this, the prothorax assumes a special form, the anterior margin being arcuate and medially subprominent, and the fifth abdominal segment is more developed though, similarly, only the first three are basally impressed. The only species is very minute and occurred in some numbers on the banks of the southern Mississippi; it may be described as follows:

Crimalia quadriceps n. sp.—Oblong, subparallel, moderately convex, rather shining, pale testaceous, the elytra somewhat more obscure, the abdomen blackish, gradually somewhat pale basally but not at apex, the legs pale; punctures of the head and pronotum rather large and widely spaced, shallow on the former, rather deep but not asperate on the latter, much finer, rather sparse and scarcely at all asperate on the elytra, inconspicuous on the abdomen though slightly more asperate and with the reticulation stronger apically; pubescence rather coarse, pale, not erect; head rather small, slightly transverse, three-fourths as wide as the prothorax, the eyes well developed, prominent and very finely faceted, the tempora much less prominent, parallel and nearly straight to the basal angles, which are right and but very narrowly rounded, the base rectilinearly truncate; antennæ short and rather slender, gradually and moderately incrassate distally in about apical half, pale in color, very slightly infumate at tip, the two basal joints thick, the second slightly the shorter, the third scarcely half as thick, slightly shorter than the second, fourth about as long as wide, the joints thence gradually larger, very slowly at first, more rapidly near the tip, the tenth twice as wide as long, the last ogival, as long as the two preceding; prothorax three-fourths wider than long, parallel and feebly, evenly arcuate at the sides, the base broadly rounded, with obtuse but distinct angles, the apex even more rounded medially, the lateral angles, from above, broadly rounded, the surface unimpressed; elytra slightly shorter than wide, with just visibly diverging sides, at base very slightly wider, the suture one-half longer, than the prothorax, the apical sinuses small and moderate in depth; abdomen rather wide though evidently narrower than the elytra, the sides parallel, just visibly arcuate, the fifth tergite fully one-half longer than the fourth. Length 1.25 mm.; width 0.28 mm. Mississippi (Vicksburg).

To be known very readily by its minute size, coloration and the peculiar form of the head and prothorax. The male differs from the female only in having the fine feeble asperities scattered over the fifth and sixth tergites, much larger, strongly elevated and somewhat elongate, with the sixth longer, relatively narrower and more strongly rounded at tip. The size in the seven specimens at hand is very uniform.

Goniusa Csy.

The species *Euryusa obtusa*, of LeConte, upon which this genus is founded, is very widely distributed in the nearctic regions, Mr. Criddle having recently sent me a male from Aweme, Manitoba, which appears to be perfectly similar to those in my collection taken in the District of Columbia. This extended range is parallel to that of the Pæderid *Megastilicus formicarius* Csy., of which Mr. Criddle also sends me an example from Aweme, not differing in any way from those taken by Mr. Blanchard in Massachusetts.

Thecturota Csy.

Oligurota Csy.

This genus of minute and extremely slender species is allied to *Thectura*. I have confirmed the original count of four joints in the middle tarsi by the renewed examination of many examples and there can be no doubt that the genus is Bolitocharid, though resembling at first sight some of the minute species of *Hydrosmecta*, recently separated by Ganglbauer under the name *Hydrosmectina*. The species recently described by Bernhauer under the name *Hydrosmectina subtilior*, is evidently a *Thecturota*, as in fact is conclusively proven by an actual specimen in my possession, collected at Pasadena, Cal. The remarkable transverse fossa at the middle of the base of the occiput is one of the most important generic characters of *Thecturota*, and has been developed to receive the anterior tip of the prothorax when the head is thrown upward, a manœuvre which is evidently practiced by the insect, as shown by the condition of a number of dried specimens before me.

The genus *Thecturota* is a large one and is distributed over the entire nearctic region of North America; the following are some additional species:

Thecturota laticeps n. sp.—Very slender, parallel, feebly convex, slightly shining, blackish-piceous, the pronotum and elytra paler; head large, not at all longer than wide, fully as wide as the prothorax, feebly inflated at base, the eyes small and anterior, slightly prominent; surface minutely and rather strongly sculptured, especially toward and on the sides, the front with a small feeble elongate impression, just before the middle; antennæ rather short, as long as the head and prothorax, blackish throughout, sometimes wholly pale from immaturity, gradually distinctly incrassate distally, the first joint nearly as long as the next

two and thicker, second as long as the third and fourth, the former evenly obconic, the latter transverse and short, the tenth three-fourths wider than long, the last ogival, as long as the two preceding; prothorax and elytra finely, simply, not densely punctate, the former a third wider than long, widest at apex, the sides thence slightly converging and very feebly arcuate to the obtuse and blunt basal angles, the median line feebly and equally impressed throughout; elytra fully as long as wide, with feebly diverging sides, just visibly wider, the suture a fourth longer, than the prothorax; abdomen at base narrower than the elytra, the perfectly straight sides sensibly diverging thence to the tip of the fifth tergite, where it is wider than the elytra, the first four tergites impressed at base though rather finely. Length 1.1 mm.; width 0.2 mm. Texas (Austin and Waco).

Allied to *capito*, from the coast regions of Texas, but differing in the broader and more closely sculptured head, with the middle of the front much less impressed, in its much less transverse prothorax and relatively shorter elytra; the abdomen is pallescent at tip and its peculiar form is scarcely suggested in *capito;* sexual characters are not apparent.

Thecturota fracta n. sp.—Still more slender, shining, pale in color, the head and abdomen more piceous; punctures throughout very fine, moderately close, narrowly parted along the middle on the head, the pubescence scant, moderately long and pale; head subparallel, longer than wide, distinctly wider than the prothorax, not strongly sculptured, shining, broadly rounded at base, the sides nearly straight, the eyes very small and anterior, prominent, the front with a short canaliculation just before the middle; antennæ nearly as in the preceding, pale, feebly infumate distally, the third joint abruptly constricted at base, slightly longer than wide; prothorax but slightly wider than long, otherwise nearly as in the preceding, the median line very finely impressed, rather more distinctly toward base; elytra as long as wide, nearly a fourth wider and about a fourth longer than the prothorax, the apices transversely subarcuate laterally as usual; abdomen nearly as in *laticeps*, though at apex scarcely visibly wider than at base and barely as wide as the elytra, the fifth tergite rather longer than the fourth. Length 1.0 mm.; width 0.17 mm. Arizona (Tucson).

Distinguishable readily from the preceding by its more slender form, more elongate head, much smaller and still less transverse prothorax and paler coloration, probably as a normal condition, although *laticeps* is frequently as pale but doubtless from immaturity in great part.

Thecturota nevadica n. sp.—General form and sculpture nearly as in the preceding, the color darker throughout and the punctures closer, the pubescence shorter and inconspicuous, directed obliquely outward

on the elytra, the minute reticulation of the head much stronger; head as long as wide, fully as wide as the prothorax or apparently a little wider, evidently gradually inflated basally, the eyes small, convex and anterior; front broadly concave medially except behind the middle; antennæ blackish, nearly as in *laticeps*, except that the second joint is not quite so long as the third and fourth combined, the third much longer than wide, evenly obconic, the fourth transverse, tenth nearly twice as wide as long; prothorax but just visibly wider than long, only very feebly narrowed from apex to base, the sides evenly and very sensibly arcuate, the median line finely and deeply impressed throughout; elytra fully as long as wide, with distinctly diverging sides, at base distinctly wider, the suture a fourth longer, than the prothorax; abdomen as in *fracta*. Length (extended) 1.2 mm.; width 0.19 mm. Nevada (Reno).

Resembles *fracta* though slightly less slender and evidently larger in size, the prothorax still less transverse and the elytra larger and less parallel. From *subtilior* Bernh., it differs in the much larger concavity of the front, coarser impressed median line of the pronotum, less elongate and more strongly sculptured head and other characters. As usual, the anterior margin of the prothorax is arcuate and, here, is rather prominent medially, the short transverse fossa at the base of the head being deep and clear-cut to receive it.

Thecturota histrio n. sp.—Slender, subparallel, feebly convex, rather shining, dark rufo-piceous, the elytra paler and more yellowish, the head and abdomen black, the legs pale; pubescence short; punctures fine and close-set, a little larger but very shallow on the head, which is rather longer than wide, very feebly and gradually inflated basally and sensibly narrower than the prothorax, the eyes only feebly prominent and at a little less than twice their length from the base, the front with a small deep punctiform fovea just before the centre, the transverse basal impression fully half as long as the entire width; antennæ dark piceous-brown, of the usual form, the basal joint not quite so long as the next two and much thicker, the tenth not more than one-half wider than long, the last elongate-oval, as long as the two preceding; prothorax nearly a third wider than long, the sides distinctly converging and broadly, subevenly, moderately arcuate from apex to the very obtuse and rounded basal angles, the median line sharply, rather finely, deeply and equally impressed throughout; elytra nearly as long as wide, subparallel, about a fifth wider, the suture a fourth longer, than the prothorax; abdomen at base narrower than the elytra, the sides straight and very feebly diverging to the tip, which is almost as wide as the elytra. Length 1.25 mm.; width 0.2 mm. Virginia (Fort Monroe).

Readily distinguishable from the Catskill *demissa*, the only comparable species, by its larger size, smaller and less prominent eyes,

which in *demissa* are at only about one-half more than their own length from the base, relatively narrower head, larger, less transverse prothorax and closer punctulation.

The name *Oligurota pusio* was given by the writer (Ann. N. Y. Acad., VII, p. 361) to a species with slightly shorter and more transverse head, larger eyes than usual and shorter elytra, the suture being barely as long as the prothorax; in all other characters it is, however, homologous with *Thecturota* and it should therefore be united with the latter. *Oligurota* might possibly be held to be a subgenus, but apparently is not of any greater value.

Subgenus **Hemithecta** nov.

The very distinct species described under this name is regarded as subgeneric to *Thecturota*, principally because of its general resemblance in many points; it differs however very greatly. The antennæ are still shorter and more incrassate, the eyes still much smaller and not at all convex but flat and more finely faceted; there is no trace of the characteristic transverse occipital fossa of *Thecturota* and the abdomen is quite different, for, instead of four rather fine but distinct basal impressions, we have here the first tergite very broadly and feebly impressed, the second broadly and only just visibly and the others unimpressed so far as observable; the fifth tergite, also, is very much longer. All the other structural characters, however, except sculpture, seem to be virtually the same as in *Thecturota*. The type is the following:

Thecturota (Hemithecta) ruficollis n. sp.—Minute, slender, parallel, moderately convex, subalutaceous, the abdomen more shining, blackish-piceous in color, the head slightly, the prothorax much, paler and rufescent, the legs pale; pubescence short but rather bristling, inconspicuous; punctures of the head fine, close, not parted along the median line as they are in *Thecturota*, of the pronotum fine and rather close, of the abdomen fine, somewhat numerous and asperulate basally, very remote posteriorly, the tip with a few minute and sparse asperities; head gradually broader basally and with arcuate sides, as long as wide and about as wide as the prothorax, the minute sculpture rather stronger then elsewhere, the front convex, scarcely at all impressed; antennæ pale piceous, short, nearly as in *Thecturota*, gradually strongly incrassate, the first joint evidently though only moderately longer than the second, the latter as long as the next two, fourth transverse, tenth more than twice as wide as long, the last sharply ogival and longer than the two preceding; prothorax but slightly wider than long, subparallel, the sides

evenly and very feebly arcuate, the basal angles obtuse but sharp, not at all blunt or rounded as they are in *Thecturota*, the median line wholly unimpressed—also unlike that genus; elytra nearly as long as wide, with evidently diverging sides, only very slightly wider and about a fourth longer than the prothorax, the apices—unlike *Thecturota*—being feebly but evidently sinuate laterally; abdomen slightly narrower than the elytra, perfectly parallel, with straight sides throughout, the fifth tergite fully one-half longer than the fourth. Length 1.1 mm.; width 0.19 mm. California (Pomona Mts., Los Angeles Co.),—Fall.

The basal joint of the antennæ is relatively less developed than in *Thecturota*, the outer joints more transverse and the last larger, but otherwise they are as in that genus. As may be observed above, however, there are many structural incongruities, the more important relating to the eyes, base of the head, basal angles and median line of the prothorax, apices of the elytra and form and structure of the abdomen. The single type is of undetermined sex.

Amblopusa Csy.

In this genus the eyes are minute or vestigial, and it, besides, differs from other Phytosids in having the five basal abdominal tergites impressed at base, the fifth very nearly as deeply as those preceding it; in *Bryobiota* and *Thinusa* the fifth tergite is not impressed and the eyes are well developed throughout. *Bryobiota* has the middle tibiæ densely bristling throughout with short stiff equal hairs, while in *Thinusa* the middle tibiæ are sparsely and more finely pubescent, with the outer side bearing long stiff spinules —a wholly different structure, but identical with that of the European *Actosus*. *Amblopusa brevipes* Csy., the type of this genus, was originally described from a single example taken at Fort Wrangel, Alaska. Mr. Keen has since sent it in some number from Metlakatla, British Columbia, and *borealis*, described from Queen Charlotte Islands, has also been sent from Metlakatla. The following seems to be another species:

Amblopusa pallida n. sp.—Subparallel, only very feebly convex, slightly shining, very pale brownish-flavate throughout every part of the body and legs; minute sculpture strong, obscuring the punctures anteriorly, the punctures rather close, those of the elytra more distinct but sparser and extremely minute, of the abdomen numerous, fine, asperate on the sixth tergite; pubescence pale, moderately long, stiff and suberect; head large, slightly wider than the prothorax, a little longer than wide, evenly oval, parallel and arcuate at the sides, the eyes extremely minute, an-

terior, consisting of only about three separated facets; antennæ not as long as the head and prothorax, gradually and distinctly incrassate distally, the second joint almost as long as the first and as long as the next two, third one-half longer than wide, constricted at base, fourth slightly, the tenth two-thirds, wider than long, the last obtuse, not as long as the two preceding; prothorax somewhat longer than wide, widest at apical fourth, where the sides are narrowly rounded, thence distinctly converging and nearly straight to the obtuse and blunt basal angles, the surface broadly, very feebly impressed along the middle except at apex and base; elytra short, at base as wide as the base, at apex not quite as wide as the widest part, of the prothorax, the suture two-thirds as long as the latter; abdomen at base not quite as wide as the elytra, but, at apex, distinctly wider than the latter, the sides evenly diverging and straight, the fifth tergite one-half longer than the fourth, with the basal impression deep. Length (rather contracted) 1.6 mm.; width 0.3 mm. Vancouver Island (Victoria),—Wickham.

Distinguishable from *brevipes* by the relatively larger head and prothorax, shorter and less parallel abdomen and different coloration.

Thinusa Csy.

This will probably prove to be a tolerably large genus; it is confined to the seabeaches of the Pacific coast. It is very closely allied to the European *Actosus*, to which it might perhaps with some propriety be attached as a subgenus. It agrees with *Actosus* in the structure of the abdomen, the fifth tergite not being impressed as it is in *Amblopusa*, in its well developed eyes, spinose external edge of the middle tibiæ and in having the tarsal claws abruptly bent at a nearly right angle at base; but the hypomera or inflexed sides of the pronotum are less vertical in plane or slightly inflexed and are narrower and more parallel, not being anteriorly so dilated as they are in *Actosus*. The following are some species hitherto undescribed:

Thinusa divergens n. sp.—Moderately slender and convex, parallel, blackish-piceous, the head nearly, the abdomen above and beneath deep, black, the under surface and legs pale brown, the elytra feebly pallescent at base; surface dull, the reticulation fine and very strong, much larger though feebler on the shining abdomen; punctures of the head well separated, shallow, parted along the middle, of the pronotum and elytra close but obscure, of the abdomen fine, rather sparse, nowhere asperate; pubescence pale, rather long, very coarse and bristling; head slightly wider than long, not quite as wide as the prothorax, parallel and feebly arcuate at the sides, the eyes well developed, not prominent, bristling with erect setæ and at a little less than their own length from the base; antennæ blackish, paler basally, one-half longer than the head, the basal

joint nearly four times as long as wide, the second long but evidently shorter, constricted basally, longer than the next two, third one-half longer than wide, constricted basally, fourth wider than long, four and following very gradually and moderately incrassate, the tenth nearly twice as wide as long, the last obtusely ogival, not as long as the two preceding; prothorax slightly wider than long, notably convex, widest at anterior third, the sides broadly rounded, strongly converging and straight basally to the obtuse and blunt angles, the median line finely and feebly impressed throughout; elytra short, with nearly straight and very strongly diverging sides, at base rather wider than the base, at apex somewhat wider than any part, of the prothorax, the suture but little more than half as long as the latter and very much shorter than the flanks, which project posteriorly beyond the median parts; abdomen subparallel, with straight sides, about as wide as the elytra, the fifth tergite perhaps a little wider than the base, a third longer than the fourth. Length 2.2 mm.; width 0.48 mm. British Columbia (Metlakatla),—Keen.

Much larger and stouter than *maritima* and less stout than *fletcheri*, with shorter, more rapidly incrassate antennæ distally, much less punctate abdomen, more diverging sides of the elytra and different coloration among many other discordancies.

Thinusa nigra n. sp.—Smaller, less elongate and more depressed, black throughout above, piceous beneath anteriorly, the legs pale brown; surface dull, the abdomen but feebly shining; punctures dense but obscure, more distinct on the abdomen though still rather close throughout; pubescence silvery, notably short, very stiff, not bristling, streaming outward from the median line on the pronotum, much longer and bristling on the abdomen; head nearly as in *divergens* but only four-fifths as wide as the prothorax, the eyes not quite so large, the antennæ similar but a little shorter, blackish, paler basally; prothorax nearly as in the preceding but relatively larger, very slightly more transverse and less convex, the median line more strongly and less finely, though acutely, impressed; elytra short, much more parallel, the sides barely perceptibly diverging, at base slightly wider than the base, at apex much narrower than the widest part, of the prothorax, the suture three-fifths as long as the latter and but very little shorter than the sides; abdomen parallel, equal in width to the eytra, the fifth tergite scarcely as wide as the base, nearly one-half longer than the fourth. Length 1.7 mm.; width 0.45 mm. British Columbia (Metlakatla),—Keen.

To be known from *divergens* by its shorter and more compact, more parallel build, shorter pubescence, more depressed surface, darker coloration, denser punctuation throughout, and especially on the abdomen, and in its more parallel elytra.

The following may be regarded as a subspecies of *fletcheri:*

Thinusa robustula n. subsp.—General form, coloration and sculpture as in *fletcheri* but a little smaller in size and with the pubescence shorter, more even and less bristling; head similar, the punctures more distinct, similarly narrowly parted along the median line, the antennæ similar though somewhat shorter, the joints from the fourth slightly more transverse, the third more pedunculate at base; prothorax shorter and sensibly more transverse, otherwise nearly similar; elytra similar though with much shorter and more decumbent pubescence; abdomen similar though slightly more shining, with the punctures somewhat finer and not quite so close-set. Length 2.1 mm.; width 0.5 mm. British Columbia (Metlakatla),—Keen.

The differences as announced above hold true and constant, as far as the two examples of *robustula* and four of *fletcheri* before me are concerned; they indicate perhaps, that the latter form has probably been modified by reason of its insular habitat, during a comparatively short period of isolation. Inferences of this kind are, however, nothing more than speculative; the differences between the two forms are real and readily observable.

Tribe HYGRONOMINI.

The genera of this tribe are very limited in number and characterized by having only four joints in all the tarsi. There is an interesting group, highly developed in subarctic North America, having peculiarly contorted tarsal claws, which seems to be wholly unrepresented in the palæarctic fauna,—the genus *Hygronoma* differing very much in tarsal structure, as well as in other ways. A careful survey of the material in my collection shows that there are five generic or subgeneric sections of this group, which may be defined as follows:

Form nearly as in *Falagria*, rather stout, with much narrower head and prothorax, the antennæ well developed; neck more than half as wide as the head; infra-lateral cephalic carinæ wholly wanting; only the first three abdominal tergites impressed at base, the impressions subequal, sharp and sculptureless; basal joint of the hind tarsi fully as long as the next two or longer; color black. Atlantic to Pacific. . . . . **Bamona**

Form linear; coloration nearly always pale. 2

2—First four tergites impressed at base; neck well defined, the head constricted at base; infra-lateral carinæ wanting or vestigial; elytra well developed and long; size moderate to small. 3

First tergite deeply impressed, the second broadly and feebly, the others unimpressed; neck not defined, the broadly truncate base of the

head abutting broadly against the prothorax; infra-lateral carinæ distinct and entire; size very minute.....5

3—Neck slender, about a third as wide as the head; antennæ short, the penultimate joints strongly transverse; four basal impressions of the tergum subequal, deep and coarsely punctate; basal joint of the hind tarsi moderate, shorter than the next two. Atlantic regions. .....**Leptobamona**

Neck wide, fully half as wide as the head or more; tergitical impressions wholly impunctate but with rather large and strong micro-reticulation.....4

4—Tergum generally bearing medial crests or carinæ in the male, affecting the first and fifth segments; antennæ long, the penultimate joints elongate to feebly transverse; basal joint of the hind tarsi long. Atlantic to Sonoran Pacific regions .....**Gyronycha**

Tergum without modification in the male; antennæ shorter, the penultimate joints transverse; basal joint of the hind tarsi shorter than the next two combined; body smaller and more slender. Pacific coast fauna.....**Gyronychina**

5—Elytra less developed than in any of the preceding genera, sometimes much abbreviated, the outline generally more parallel and compact, though with the abdomen long as usual; antennæ notably short and relatively thicker distally as a rule, the penultimate joints strongly transverse. Atlantic and Gulf States .....**Alisalia**

Bamona Sharp, was originally described from Mexico, but the three American species *falliana*, *tenuissima* and *carolinæ*, seem to be strictly congeneric. The second scarcely merits its name, for, although the most slender of the three in *Bamona*, it is stout when compared with most of the species following in the group, especially the extremely slender *Leptobamona* and *Alisalia;* as well as several of the genus *Gyronychina*. *Leptobamona* has for its type and only known species *Gyronycha pertenuis* Csy.; it is represented at present by a single specimen.

If any combination is to be made among the above genera, I would recommend that *Gyronychina* be made a subgenus of *Gyronycha*. The other genera are so distinct among themselves that they cannot be reduced to the status of subgenera with any degree of propriety.

Gyronycha Csy.

This genus includes the largest species of the group. It is probable that the male has cariniform tubercles on the tergum in all the species. The following were overlooked in my previous revision (Ann. N. Y. Acad., VII, p. 372):

Gyronycha lepida n. sp.—Moderately slender, only feebly convex, shining, piceous-brown, the head blackish, the elytra paler and more flavate, the abdomen testaceous; punctures very fine and close-set, sparse on the abdomen, pubescence moderately long; head quadrate, parallel, as long as wide, evidently narrower than the prothorax, the eyes slightly prominent, at much more than their own length from the base, the tempora slightly less prominent, straight and parallel, broadly rounding at base; antennæ long, gradually and evidently incrassate, throughout nearly as in *fusciceps;* prothorax not quite so long as wide, subparallel, just visibly wider near apical third than at base, the sides feebly arcuate, less so basally, the basal angles obtuse and somewhat blunt, the surface with a feeble transverse ante-scutellar impression; elytra rather longer than wide, parallel, with straight sides, fully a third wider and three-fifths longer than the prothorax; abdomen long, parallel, much narrower than the elytra, the fifth tergite fully one-half longer than the fourth. Length (♀) 2.5 mm.; width 0.6 mm. North Carolina (Asheville).

This species was confounded with *fusciceps* in my previous revision; it is closely allied to the latter, resembling it in general size and form, but differs in many minor features; the head, for example, is not at all swollen behind the eyes as it is in that species, the eyes are evidently not as large and the antennæ less strongly incrassate distally; the prothorax is slightly broader and, finally, the coloration is somewhat darker, the pubescence longer and the punctures of the abdomen more numerous; the types of both species are females and I have before me three examples of each.

Gyronycha longicornis n. sp.—Similar in coloration, lustre and sculpture to the preceding and *fusciceps;* head smaller, not quite as long as wide and four-fifths as wide as the prothorax, the eyes large, at but little more than their own length from the base, the tempora parallel though slightly swollen and a little more prominent than the eyes; front feebly canaliculate on the median line before the middle and thence, at each side of the middle, toward the antennæ, the latter notably long, extending to the tips of the elytra, gradually incrassate, infumate, gradually paler basally, the third joint as long as the first and distinctly longer than the second, fourth more than a fourth longer than wide, fourth to tenth all longer than wide, obtrapezoidal though decreasingly so, the tenth a fourth longer than wide, the last elongate-oval, as long as the two preceding; prothorax slightly wider than long, widest before apical third, where the sides are somewhat prominently rounded, thence slightly converging and straight to the very obtuse basal angles, the base and apex both rounded, the surface with the transverse ante-scutellar impression almost obsolete; elytra not quite as long as wide, with feebly diverging straight sides, about a fourth wider and less than one-half longer than the prothorax; abdomen distinctly narrower than the elytra, parallel, very feebly

narrowing near the apex, the first tergite (♂) with a medial carina which projects posteriorly, the fifth fully one-half longer than the fourth, with the usual small carinule at the middle toward base. Length (♂) 3.0 mm.; width 0.65 mm. New York (Ithaca).

Very distinct from the preceding and *fusciceps* in its longer antennæ, smaller head, less elongate elytra and other characters; the pubescence is very short as in *fusciceps*.

One of the more notable peculiarities of this genus is that the male very much exceeds the female in size; in a series of five males and six females of *texana*, before me, this is very marked, the male being about two-fifths heavier than the female as can be seen at a glance, with the head relatively smaller and the antennæ longer in the former sex; hence it might be thought that the above described *longicornis* might be nothing more than the male of *fusciceps*. But, on comparing the male and female of *texana*, I do not find strictly similar sexual differences; for example, the general form of the body differs but little in the two sexes of *texana*, while between *longicornis* (♂) and *fusciceps* (♀) the difference in the form of the body is very great and the antennæ differ much more than in the two sexes of *texana;* in *texana* the elytra of the female are relatively smaller and much shorter than in the male, but in *fusciceps* (♀) the elytra are narrower and more elongate than in *longicornis* (♂). So there can be but little doubt that the latter two are distinct species.

Gyronychina n. gen.

The species in this group are smaller than in *Gyronycha* and generally still more slender, with the elytra even more elongate, the basal joint of the hind tarsi much shorter and the sexual characters less accentuated and of a different kind; it is peculiar to the true Pacific coast fauna, but how far it extends to the northward is not known at present. The type of the genus is *Calodera attenuata* Csy., (Bull. Cal. Acad., I, p. 306).

The sexual characters of this genus are quite different from those of *Gyronycha*, as shown by a male and female of *fenyesi* Bernh., originally described (Deutsche Ent. Zeits., 1906, p. 307) under the name *Aleuonota fenyesi*. The male is materially larger than the female, darker in color, with distinctly longer antennæ and very slightly more elongate elytra; but the tergum is wholly unmodified

in the male, the sexual characters appearing solely at the tip of the sixth ventral plate, which in the male is broadly angulate and with a small, circularly rounded emargination at the angle; in the female it is merely broadly rounded.

The following was confounded with *attenuata* under my original description of that species:

Gyronychina longipennis n. sp.—Very slender, rather convex, shining, testaceous, the head dusky; punctures very fine and sparse throughout; micro-reticulation feeble, much larger and stronger on the abdomen, especially toward tip, polygonal as usual; pubescence coarse, not dense, pale and rather long; head as wide as long, convex, the eyes slightly prominent, at three-fourths more than their own length from the base, the tempora less prominent, straight and parallel behind them for the length of the eye, then rapidly arcuato-converging to the neck, which is two-thirds as wide as the head; antennæ missing in the type but probably nearly as in *attenuata*, the outer joints transverse, the third shorter than the second; prothorax fully as wide as the head and a little shorter, very slightly wider than long, convex, widest at apical third, where the sides are rather broadly rounded, thence very feebly converging and straight to the obtuse basal angles, the surface not definitely impressed; elytra parallel, with straight sides, evidently longer than wide, nearly a third wider and three-fifths longer than the prothorax, rather flat, the apices feebly sinuate laterally, with the flanks slightly projecting posteriorly as usual; abdomen long, parallel, distinctly narrower than the elytra, the fifth tergite elongate. Length 1.75 mm.; width 0.37 mm. California (Calistoga, Napa Co.).

Differs from *attenuata* in its still more slender form, relatively narrower and more elongate elytra and sparser punctulation, especially of the head, the basal angles of the latter less broadly rounded. In the type of *attenuata*, from Paraiso Springs, Monterey Co., the sixth ventral plate projects medially, the apex of the very obtuse lobe apparently narrowly truncate; it is therefore a male, in all probability, and its relatively less elongate elytra would indicate that it could not be the male of *longipennis*, even if the type of the latter were a female, for the rule is that the elytra of the female are shorter than those of the male. The sixth ventral is strongly retracted in the type of *longipennis* and therefore cannot be observed; it is probably a male however.

Alisalia n. gen.

In addition to the characters previously stated, the numerous minute species of this genus have the eyes less developed than usual

in this group of genera and nearly flat; the slender tarsi are almost as in the preceding genus, the first joint of the posterior not as long as the next two; the middle coxæ are contiguous, separated beneath by a fine sunken lamina, the mesosternal process short, very finely acute at tip and separated by an extended interval from the small but almost equilatero-triangular metasternal projection. In common with the other genera of this group, the hypomera are only moderately inflexed and are wholly visible from the sides. The first species described below has the elytra notably shorter than the others:

Alisalia brevipennis n. sp.—Parallel, rather convex, strongly shining, pale testaceous, the head and an indefinite subapical abdominal cloud dusky; punctures very fine, not close, the pubescence pale, short but inclined, rather coarse and sparse; head subtriangular, with rounded sides, as long as wide, not quite as wide as the prothorax, the eyes small, not prominent, anterior; antennæ short, dusky, paler basally, the second joint scarcely shorter and slightly thinner than the first, as long as the next two, third one-half longer than wide, obconic, fourth wider, transverse, fifth still wider and more transverse, fifth to tip subequal in width and stout, the tenth more than twice as wide as long, the last obtusely ogival, rather longer than the two preceding; prothorax transverse, two-fifths wider than long, slightly widest before the middle, the sides broadly arcuate, the basal angles very obtuse, rounded, the surface wholly unimpressed; elytra short, transverse, equal in width to the prothorax, the suture barely as long as the latter and decidedly shorter than the elytral flanks; abdomen long, parallel, as wide as the elytra, the fifth tergite about a third longer than the fourth. Length 1.25 mm.; width 0.18 mm. Rhode Island (Boston Neck).

Sexual characters are not apparent among the numerous examples taken some years ago, probably in fungous earth; the individuals are quite uniform in size.

Alisalia parallela n. sp.—Parallel, compact, moderately convex and shining, testaceous, the head blackish, the abdomen with a large suffused and feebly dusky subapical area, the elytra somewhat dusky though more yellowish; punctures very fine and rather dense, sparser on the abdomen, the reticulation of which is remarkably coarse basally but smaller and stronger apically, where the punctures become sparser though sharply asperulate; pubescence short, coarse, decumbent, pale; head much wider than long, five-sixths as wide as the prothorax, feebly broadening basally, the eyes feebly convex, at one-half more than their own length from the base; antennæ nearly as in the preceding but less thick and with the third joint twice as long as wide, the tenth twice as wide as long, the last much longer than the two preceding; prothorax two-fifths wider than long, nearly as in the preceding, the basal angles more distinct, the base sub-

truncate medially, thence oblique, becoming feebly sinuate near the angles; elytra evidently shorter than wide though much more developed than in *brevipennis*, parallel, very slightly wider, the suture nearly a third longer, than the prothorax; abdomen slightly narrower than the elytra, parallel, with straight sides. Length 1.2 mm.; width 0.22 mm. Texas (Waco and Galveston).

In the type, the asperities seem to form two subparallel discal lines on the fifth tergite, separated by a third of its width and the sixth ventral plate is evenly, circularly rounded. In the Galveston example the antennæ are more gradually incrassate distally and less parallel than in the Waco type, and, at tip, are thicker, but otherwise there is a very close mutual resemblance; the differences may be due to sex, the type being a male.

Alisalia testacea n. sp.—Slender, not quite parallel, moderately convex, shining, testaceous, the head distinctly, the elytra just visibly, dusky; punctures minute, rather close, sparse on the abdomen; pubescence short, not dense, coarse and pale; head slightly shorter than wide, scarcely four-fifths as wide as the prothorax, strongly inflated at base, the eyes small, slightly convex, at about twice their length from the base; antennæ rather short, moderately stout, dusky, slender and paler basally, the second joint as long as the next two, third obconic, one-half longer than wide, fourth wider, very transverse, fifth to tip still wider but increasing only very slightly, the tenth more than twice as wide as long, the last ogival, longer than the two preceding; prothorax two-fifths wider than long, the sides broadly rounded, straighter and feebly converging from before the middle to the very obtuse and blunt basal angles; elytra evidently shorter than wide, with feebly diverging straight sides, a little wider and a third longer than the prothorax; abdomen slightly narrower than the elytra, long, parallel, the fifth tergite one-half longer than the fourth, smooth (♀) or with stronger, sparsely scattered asperities (♂); sixth ventral plate very broad, trapezoidal, with evenly arcuate apex (♀), or narrower and evenly rounded (♂). Length 1.5 mm.; width 0.26 mm. North Carolina (Asheville).

The abdominal impressions are a little stronger in the male than in the female, and the third tergite is feebly impressed along the elevated arcuate basal border in that sex. This species is rather abundant and differs from *parallela* in its less parallel form and less transverse and more basally inflated head; also in its larger size, stouter form and more developed elytra.

Alisalia minutissima n. sp.—Slender, shining, moderately convex, subparallel, pale piceo-testaceous, the head still a little darker; punctures very fine, not dense, closer and stronger toward the base of the head medially, sparse on the abdomen; pubescence inconspicuous; head nearly

as long as wide, only just visibly narrower than the prothorax, oval, widest before the base, the sides broadly rounded; eyes small, not prominent, at twice their length from the base; antennæ notably short, dusky, paler basally, the second joint distinctly shorter and thinner than the first, as long as the next two, the third obconic, but little longer than wide, fourth very transverse, fourth to tip gradually and rather rapidly wider, becoming notably stout at tip, the very transverse outer joints more than twice as wide as long; prothorax nearly as in the preceding but only about a third wider than long; elytra less developed, subparallel, scarcely visibly wider, the suture but little more than a fifth longer, than the prothorax; abdomen barely narrower than the elytra, parallel, the fifth tergite one-half longer than the fourth. Length 0.9 mm.; width 0.18 mm. North Carolina (locality not recorded).

The single type of this species, the smallest known to me, is a female; it differs from the female of *testacea* in its more slender parallel form, shorter, more gradually incrassate antennæ distally, smaller elytra and in having the broad trapezoidal sixth ventral plate, not broadly and evenly rounded at tip, but broadly and obtusely angulate; the abdomen seems to be a little wider at the apex of the fifth tergite than at base.

Alisalia delicata n. sp.—Very slender, subparallel, shining, testaceous, the head dark, the subapical abdominal cloud small and barely distinguishable; punctures very fine, not dense; head nearly as long as wide, barely at all narrower than the prothorax, gradually and moderately inflated to the unusually broadly rounded basal angles, the eyes at nearly twice their length from the base; antennæ as usual in general structure but with the second joint not quite as long as the next two, third more than one-half longer than wide, subpedunculate at base, fourth and following strongly transverse, fourth to seventh gradually wider, seven to tip subequal in width and moderately stout, the last obtuse, much longer than the two preceding; prothorax of the usual form, two-fifths wider than long, a little wider before the middle than at base; elytra shorter than wide, a fourth wider and fully two-fifths longer than the prothorax; abdomen slender, much narrower than the elytra, the fifth tergite (♂) not quite one-half longer than the fourth and with scattered asperities. Length 1.5 mm.; width 0.2 mm. Colorado (Cañon City),—Wickham.

The single male type has the sixth ventral plate broadly, subevenly arcuate at tip. This species is much more slender than *testacea* and with relatively less developed head and prothorax. The type is gummed with a very small pale flavate ant.

Alisalia austiniana n. sp.—Slender, feebly convex, rather shining, pale brownish-testaceous, the abdomen redder, the head but slightly more dusky; punctures very fine, close, sparser on the abdomen; pubescence

short, decumbent, rather fine, pale; head gradually inflated basally, convex, nearly as long as wide, almost as wide as the prothorax, the eyes rather small, anterior; antennæ pale, ochreous, short, gradually and strongly incrassate distally, the second joint as long as the next two, third pedunculate at base, tenth twice as wide as long, the last obtuse, as long as the two preceding; prothorax but little wider than long, of the usual form, the sides feebly converging from near apical third to the obtuse but distinct basal angles; elytra better developed than usual, a fourth wider and two-fifths longer than the prothorax (♂) or a little shorter (♀); abdomen parallel, narrower than the elytra, the fifth tergite (♂) one-half longer than the fourth, the asperities sparse but tending to lineal arrangement, with two specially pronounced parallel series, separated by one-half the entire width; sixth ventral plate (♀) broad, rapidly narrowed from the base for a short distance, the apex broadly angulate, with the angle rather broadly truncate. Length 1.25 mm.; width 0.24 mm. Texas (Austin).

Differs very much from *parallela* in its less parallel form, more developed elytra and gradually much more incrassate antennæ distally. In outline it more closely resembles *testacea* and *delicata*, but differs from the former in its much smaller size and, from the latter, in having the asperities of the fifth tergite, not evenly distributed, but more lineate, with two widely separated lines more pronounced, the types of both apparently being males.

The peculiar arrangement of the asperities of the fifth tergite in the male, giving the impression, under inadequate enlargement, of two parallel striæ, taken in connection with the small eyes and basally inflated head, leaves no doubt whatever in my mind that the *Atheta* (*Meotica*) *bistriata*, of Bernhauer, (Deut. Ent. Zeits., 1909, p. 528), is a species belonging to this genus. Nothing but the sexual characters and size of that species is adequately alluded to by the author, and therefore nothing which would seem to prohibit this disposition of it. The genus *Alisalia* will prove to be very extensive, not only in species but in geographic range.

Alisalia antennalis n. sp.—Moderately slender and shining, not parallel, pale reddish-brown, the head but very slightly darker; punctures minute and close-set, the pubescence short, inconspicuous; head slightly wider than long, four-fifths as wide as the prothorax, slightly inflated basally, the eyes rather well developed, slightly convex, at one-half more than their own length from the base; antennæ longer than usual, black, paler basally, extending to about basal third of the elytra, the second joint as long as the first but thinner, third very nearly as long as the second but more narrowed basally, fourth distinctly transverse, four to tip rather rapidly and evenly incrassate, becoming moderately thick at apex, the

tenth not quite twice as wide as long, the last obtuse, scarcely as long as the two preceding; prothorax two-fifths wider than long, nearly parallel, just visibly widest and with the sides feebly arcuate before the middle, the basal angles moderately obtuse, distinct, the surface unimpressed; elytra slightly shorter than wide, a fourth wider and nearly one-half longer than the prothorax; abdomen parallel, slightly narrower than the elytra, the fifth tergite well developed as usual. Length 1.6 mm.; width 0.35 mm. Texas (Austin).

Distinguishable at once from any other species by the much longer third antennal joint, form of the prothorax and better developed eyes and elytra; the type is a female.

Tetralina n. gen.

Body fusoid, moderately stout and slightly convex, minutely, densely punctate and pubescent throughout, with long slender filiform or feebly incrassate antennæ, large prominent eyes and without infra-lateral cephalic carinæ; the hypomera are feebly inflexed, flat and wholly visible from the sides, the elytra well developed, the apices laterally feebly sinuato-truncate; the abdomen is feebly tapering, the first two tergites feebly impressed transversely at base, the remainder apparently unimpressed; they are all rather flat, the fifth much longer than the fourth; middle coxæ well separated, the mesosternal process short, not quite extending to their middle, its apex broadly obtuse and rounded, separated from the moderate and subtriangular metasternal projection by a rather long, much depressed interval; legs long, the tarsi all 4-jointed, the posterior long, slender, filiform, densely clothed with short stiff pubescence, the basal joint very long, exceeding the next two combined, the claws rather long, very slender, evenly and just visibly arcuate.

This genus, as can be perceived from the above diagnosis, is wholly different from any other known from the nearctic regions and does not seem to be represented by any closely allied form in the palæarctic fauna. The hind tarsi might seem suggestive of *Myllæna*, but there is little or no resemblance otherwise, except in the fine dense sculpture and pubescence of the body; the maxillary palpi are well developed but are of the usual type, except that the terminal acicular joint is small. There are three species as follows, the first being the type of the genus:

Tetralina helenæ n. sp.—Rather stout, dull in lustre, black, the elytra very faintly picescent, the legs pale brown; punctures minute, close, feebly asperulate, even closer throughout the abdomen though much finer and not asperulate; pubescence short, giving a grayish tint; head much wider than long, more than three-fourths as wide as the prothorax, the eyes very large, prominent, at less than a third of their length from the base, the short tempora rapidly converging behind them; antennæ black, extending nearly to the middle of the elytra, slender, gradually and feebly incrassate, the first three joints subequal in length, the first much the thickest, fourth shorter, one-half, the fifth a third, longer than wide, the ninth nearly as long as wide, the tenth evidently wider than long, the last gradually acute apically and as long as the two preceding; prothorax a third wider than long, parallel, the sides gradually rounding and converging in about apical, and very feebly converging and nearly straight in basal, half, the basal angles obtuse but distinct, the base rounded, the apex subtruncate, the surface feebly impressed along the median line from base nearly to the apex; elytra large, slightly transverse, with very feebly diverging sides, at base a sixth wider, the suture a third longer, than the prothorax; abdomen at base distinctly narrower than the elytra, thence distinctly narrowing to the fifth tergite, with feebly arcuate sides, the sixth segment abruptly much narrower, the dorsal plate broadly rounded, the ventral truncate and with rounded angles in the type. Length 2.1 mm.; width 0.62 mm. Montana (Helena),—Wickham.

To be known by the long legs and filiform tarsi, black color, dull lustre, large convex eyes and other characters as detailed above. The sex of the type is probably female.

Tetralina filitarsis n. sp.—Form, coloration and sculpture nearly as in the preceding but smaller, much less stout, with still more developed elytra and blackish legs; head not quite so transverse, fully four-fifths as wide as the prothorax, the eyes not so large but prominent, at nearly half their length from the base, the tempora subparallel for a very short distance, then strongly and obliquely rounded to the base; antennæ piceous-black, extending to the tips of the elytra, more slender and not distinctly incrassate, subfiliform, the fourth joint three-fourths, the tenth one-fourth, longer than wide, the last slender, acutely pointed, as long as the two preceding; prothorax relatively smaller than in the preceding and more than two-fifths wider than long, otherwise nearly similar, except that the impression along the median line extends from apex to base and is much broader, feebly concave and parallel, with the asperities in the concavity sparser than elsewhere; elytra shorter than wide, nearly parallel, a fourth wider, the suture almost two-fifths longer, than the prothorax; abdomen almost as in *helenæ* but narrower, the sixth segment in the type relatively not so narrow, with the broader truncate ventral plate projecting posteriorly much more beyond the dorsal. Length 1.76 mm.; width 0.45 mm. Montana (Kalispell),—Wickham.

I do not think that the type above described can be the male of *helenæ*, the very great differences in antennal structure, its relatively smaller eyes and prothorax and its slightly looser punctulation seeming to render this improbable, though the differences in the impression of the pronotum and form of the sixth abdominal segment are sexual in origin, without doubt, and indicate that the type of *filitarsis* is a male.

Tetralina alutacea n. sp.—Less fusiform and more parallel, moderately convex, dark piceous-brown, the punctures everywhere extremely minute and dense, the lustre dull, the legs long, piceous, the vestiture very short, dense; head transverse, only about two-thirds as wide as the prothorax, the eyes large, prominent as in *filitarsis;* antennæ long, slender and subfiliform, blackish, the second joint as long as the first but more slender, third distinctly shorter, fourth to sixth subequal in length, fully one-half longer than wide, the tenth shorter than the ninth but fully as long as wide, the gradually pointed last joint not quite as long as the two preceding; prothorax nearly two-fifths wider than long, formed as in the two preceding species, the median line in the type broadly and feebly concave in less than median third of the width, the asperities of the concavity minute and dense but evidently less minute than those of the rest of the surface; elytra distinctly transverse, parallel, only slightly wider, the suture but little more than a fourth longer, than the prothorax; abdomen much narrower than the elytra, subparallel, distinctly narrowing posteriorly from about the middle, the sixth segment narrow, with the truncate ventral plate projecting much beyond the dorsal in the type. Length 2.3 mm.; width 0.6 mm. California (Yountville, Napa Co.).

The type of this species is also a male. *Alutacea* differs from both *helenæ* and *filitarsis* in its less fusiform outline and still more minute and even denser sculpture.

Tribe OLIGOTINI

Species all minute in size, of oval or oblong, convex form and short clavate antennæ, of ten joints, the tarsi 4-jointed throughout.

Somatium Woll.

This genus is given as a synonym of the Chilean *Holobus* Sol., in the European catalogue of 1906, but, as I cannot verify this reference at present and feel sure that our species are at least *Somatium*, it would seem advisable to describe them under this name. The genus is much more developed in America than in the palæarctic fauna, and the following four are additional to the three previously described by the author (Ann. N. Y. Acad., VII, p. 379):

Somatium effugens n. sp.—Broadly oval, strongly convex, shining, deep black, the abdominal apex pale, the legs blackish; imbriform sculpture of the elytra and abdomen very coarse, the punctures of the head and pronotum fine; pubescence moderately long, coarse and sparse; head slightly more than half as wide as the prothorax, the eyes large, convex, extending to the base as usual in the genus; antennæ short, slender, rapidly and strongly incrassate apically, pale, the club infuscate, the second joint very much longer than the first, seventh transverse, the eighth, or first joint of the club, not very abruptly wider, thence rapidly wider to the tip, eighth and ninth very transverse, the latter, on the compressed side, twice as wide as long, the tenth obtuse; prothorax distinctly more than twice as wide as long, the sides very strongly converging, evenly and moderately arcuate from base to apex; elytra transverse, subparallel, with evenly and moderately arcuate sides, at base exactly equal in width to the thoracic base and closely applied throughout, the suture two-fifths longer than the pronotum and distinctly shorter than the elytral flanks; abdomen at base about as wide as the elytral tip, thence rapidly conical, with nearly straight sides, to the tip, the fifth tergite being three-fourths as wide as the base. Length 0.78 mm.; width 0.4 mm. Ohio (Cincinnati),—Dury.

Allied to *nugator* in its very coarse imbrication and color but not so stout and less oblong, being more tapering posteriorly and with the head notably smaller and the elytra shorter; the sculpture is much coarser than in *claviger*.

Somatium pallescens n. sp.—Narrowly oval and only moderately convex, shining, dark rufo-piceous, the abdomen black, scarcely at all paler at tip, the elytra dusky-rufous, the legs blackish; punctures of the head and pronotum minute, well separated, perfectly simple, the elytra with coarse and rather close asperato-imbriform sculpture, the imbrication of the abdomen somewhat laterally compressed throughout and strong; pubescence moderate; head nearly three-fifths as wide as the prothorax, the eyes moderate; antennæ short, dusky, pale basally, the second joint but little longer than the first and equally thick, fully as long as the next two and almost twice as thick, fourth a little longer than wide and truly cylindric, the sixth slightly, the seventh distinctly, transverse, seven to tip rather rapidly, almost uniformly increasing, the ninth not quite twice as wide as long, the last obtuse, not as long as the two preceding; prothorax more than twice as wide as long, the sides only moderately converging from base to apex and strongly, evenly arcuate; elytra moderately transverse, subparallel, with broadly arcuate sides, more rounding at base, at the latter equal in width to the thoracic base but, slightly posterior thereto, evidently wider than the prothorax, the suture nearly one-half longer; abdomen at base about as wide as the elytral tip, very slightly tapering, with almost straight sides, the fifth tergite fully four-fifths as wide as the base. Length 0.88 mm.; width 0.38 mm. Iowa (Keokuk).

This species differs from *claviger* in its smaller size, narrower form, smaller prothorax, simple and not subgranular punctures of the pronotum, very much stronger and more compressed abdominal sculpture, more slender and less strongly clavate antennæ and in coloration.

Somatium lustrans n. sp.—Rather broadly oval, strongly convex and shining, brownish-testaceous, the abdomen black, flavate at apex, the legs pale brown; punctures of the head and pronotum extremely minute, sparse and simple, of the elytra asperate and sparse, not imbriform, the asperities isolated, the ground sculpture minutely and irregularly reticulate, of the abdomen coarsely but feebly, regularly imbriform, becoming smooth and simply sparsely punctate apically; pubescence moderate, sparse; head distinctly more than half as wide as the prothorax, the eyes moderate; antennæ short, pale, the second joint much longer than the first, longer than the next two and nearly twice as thick, three to five mutually equal in thickness, cylindric, six a little, the seventh much, wider, both moderately transverse, the club blackish, not very abrupt, the ninth joint moderately transverse; prothorax much more than twice as wide as long, the arcuate converging sides continuing the curvature of the basal part of the elytral flanks, the elytra subparallel, convex, the suture a third longer than the prothorax; abdomen at base not quite as wide as the elytra, strongly tapering and with straight sides. Length 0.7 mm.; width 0.36 mm. Missouri (St. Louis).

Also an isolated species, of very small size, not closely related to any other described thus far.

Somatium abruptum n. sp.—Narrower and more oblong-oval, nearly similar in coloration and sculpture, the anterior parts rather darker, the punctures of the head and pronotum closer and not simple but minutely asperulate, the asperities of the elytra much closer and stronger; pubescence rather fine, decumbent, moderately close on the elytra; head nearly as in the preceding, the antennæ short, pale throughout, the second joint much longer than the first, longer than the next two and nearly twice as thick, seventh only about one-half thicker than the third and transversely suboval, the club very abruptly formed, broad, not at all darker in color than the stem, the eighth and ninth joints strongly transverse, obtrapezoidal, the last about as long as the two preceding, obtusely pointed; prothorax less transverse than in the preceding and with the sides less converging but rather more arcuate from base to apex, more than twice as wide as long, at base equal in width to the base of the elytra, the latter well developed, the suture two-fifths longer than the pronotum; abdomen nearly as in *lustrans* throughout and similarly sculptured. Length 0.63 mm.; width 0.28 mm. Mississippi (Vicksburg).

Allied to *lustrans* in general structure but much narrower and less oval, differing decidedly in sculpture, as stated, and with the

antennal club not darker in color than the stem and very much more abruptly formed than in any other of our species; it is also the most minute of the Oligotini known to me, though not much smaller than *lustrans*.

Oligota Mann.

Relatively speaking, this genus does not seem to be quite so developed in America as in Europe and the various forms are rather feebly differentiated, so that as a group they form a far less interesting study than the preceding genus. In the recent European catalogue, *Somatium* is inscribed as a simple subgenus of *Oligota*, but I can see no very good ground for this, as the subparallel to linear form of *Oligota* enables one to differentiate it at once from the oval stout *Somatium*, and the eyes are more developed in the latter than in *Oligota*, where they do not attain the base of the head. In the catalogue referred to, the ten species described by Rey are all given as synonyms of other forms; this would be remarkable if true, and I strongly suspect some oversight on the part of the compilers of the catalogue.

The species accredited to LeConte, under the name *Oligota pedalis*, is given as a synonym of *pumilio* Kies., in the European catalogue. From the mountains of Pennsylvania I have a considerable series of examples, collected by the late P. Jerome Schmitt, which bear a very strong resemblance to the European representative of *pumilio* in my cabinet, and therefore assume that they are the true *pedalis* of LeConte, but cannot endorse the proposed synonymy, as there are many points of difference, among which may be mentioned the much closer punctures and larger head of the American form. The following is allied to *pedalis* Lec.:

Oligota puncticollis n. sp.—Moderately stout, convex and shining, black, the abdominal tip flavate to near the base of the large fifth tergite, the legs pale; punctures of the head fine, of the pronotum strong, asperate and close, of the elytra coarsely asperate and rather close, the abdomen smoother, with coarse imbricate sculpture; pubescence somewhat long, pale and coarse but sparse and decumbent; head rather large, wider than long, almost two-thirds as wide as the prothorax, the eyes at two-fifths their length from the base; antennæ short, pale throughout, the second joint as thick as the first and two-thirds longer, much longer and one-half thicker than either of the next two, three to seven increasing but very slightly, seven wider than long, the club abrupt, the eighth and ninth joints moderately transverse, the last gradually obtusely pointed

and as long as the two preceding; prothorax not quite twice as wide as long, rounded at base, the sides only moderately converging from base to apex and evidently arcuate; elytra subparallel, with feebly arcuate sides, the base exactly equal to the thoracic base, the suture nearly two-fifths longer than the pronotum; abdomen as long as the anterior parts, parallel, with nearly straight sides, not quite as wide as the elytra. Length 0.9 mm.; width 0.28 mm. Iowa (Iowa City),—Wickham.

My single specimen was sent to me by Prof. Wickham as having been taken from "Nest IV"; it therefore occurs, at least occasionally, in the nests of ants.

Oligota californica n. sp.—Somewhat fusiform, convex, shining, dark piceous-brown to black, the elytra a little paler, the abdomen black, flavate at apex, the legs pale; punctures very fine, rather close, those of the elytra finely but more strongly and a little more sparsely asperulate, the abdomen with the usual imbricate sculpture; head rather small, three-fifths as wide as the prothorax, the eyes as usual; antennæ infuscate, pale basally, the second joint less than one-half longer than the first, seventh wider than the sixth, short and strongly transverse, seven to tip increasing slowly in width, seven to ten rapidly in length, the ninth two-fifths wider than long, the club moderately abruptly formed; prothorax rather small, more than twice as wide as long, of the usual outline; elytra at base equal in width to the base of the prothorax, the suture almost one-half longer; abdomen slightly tapering, with feebly arcuate sides, at base almost as wide as the elytra, at the fifth tergite three-fourths as wide as at base. Length 0.85–0.9 mm.; width 0.3–0.34 mm. California (San Francisco).

Not at all closely related to the preceding but rather closely to several of the following forms; the sculpture is very much finer than in *puncticollis*.

Oligota congruens n. sp.—Rather more slender, convex, more shining, nearly black, the elytra but just visibly picescent, the abdominal tip pale only from the apical margin of the fifth tergite, the legs piceous; sculpture nearly as in the preceding; head larger, nearly two-thirds as wide as the prothorax, the antennæ pale, blackish apically, the seventh joint only moderately transverse, but little more than half as wide as the eighth, the club rather abruptly formed, the eighth and ninth joints mutually subsimilar, about one-half wider than long and obtrapezoidal; prothorax larger and less transverse, convex, barely twice as wide as long, the sides less converging from base to apex, arcuate; elytra larger, parallel, with feebly arcuate sides, similar in basal relationship with the prothorax, the suture a third longer than the latter; abdomen at base slightly narrower than the prothorax, very feebly tapering thence to the tip, with almost straight sides, the fifth tergite fully four-fifths as wide as the base. Length 0.8 mm.; width 0.28 mm. California (Pomona, Los Angeles Co.),—Fall.

Differs from the preceding in its larger head, less abbreviated prothorax, more abruptly formed antennal club, less strongly tapering abdomen and blacker and more shining integuments.

There are some other forms among the numerous specimens taken by the writer in California, one from near Monterey, another from Sta. Cruz Co., and still another from Humboldt Co.; but there is such an extreme mutual resemblance among all these modifications of *Oligota*, that I hesitate to define them, even as subspecies; they certainly could never be recognized from description and scarcely from the types themselves, except under the closest observation. I think however that the two California forms here defined can be noted as distinct on cursory view of the types, though possibly not so readily from description.

Oligota esmeraldæ n. sp.—Narrowly fusoid, convex, shining, black, the elytra feebly picescent, the abdomen flavate at apex; punctures fine, asperulate, not very close-set, the elytral sculpture rather coarsely but not very strongly imbricate, the abdomen with the usual asperulate imbrication; head three-fifths as wide as the prothorax, the antennæ blackish, pale basally, the seventh joint one-half wider than long, three-fifths as wide as the eighth, the latter and ninth increasing in size, but subsimilar in form and of equal length, feebly obtrapezoidal, two-fifths and one-half wider than long, the last pyriform, about as long as the two preceding; prothorax scarcely more than twice as wide as long, the sides strongly converging and evenly arcuate from base to apex, much shorter than the median line, the base equal in width to the elytral base and closely applied thereto as usual; elytra rather transverse, with feebly arcuate sides, at apex wider than the prothorax, the suture two-fifths longer; abdomen at base slightly narrower than the elytra, tapering and with nearly straight sides thence to the apex, the fifth tergite barely three-fourths as wide as the first. Length 0.8 mm.; width 0.26 mm. Nevada (Esmeralda Co.),—Nunenmacher.

Of the same general type as the two preceding and closely allied, differing from *californica* in its more narrowly but equally distinctly fusiform outline and, from *congruens*, in its less parallel form and relatively smaller head; the antennal club, as defined, will give further differential criteria.

Oligota texana n. sp.—Smaller, narrower and more parallel, convex, shining, dark red-brown, the head and abdomen black, the latter flavate at apex; legs piceous, the coxæ flavate; punctures fine, feeble, not very close and slightly asperulate, larger but well separated and asperulo-imbricate on the elytra, the abdomen imbricate; pubescence inconspicuous; antennæ even shorter than usual, one-half longer than the head,

blackish, pale basally, the seventh joint strongly transverse, the club abrupt, the eighth and ninth joints slightly increasing, unusually short and transverse, of equal length, the tenth somewhat longer than the two preceding; prothorax short, much more than twice as wide as long, with the rounded base closely applied to the elytra throughout the width and with rather feebly converging but strongly arcuate sides; elytra moderately transverse, with feebly arcuate sides, posteriorly but just visibly wider, the suture nearly one-half longer, than the prothorax; abdomen only very slightly narrower than the elytra, the sides straight and very nearly parallel, only just visibly converging from base to apex. Length 0.75 mm.; width 0.24 mm. Texas (Austin).

Differs from the preceding in its smaller size, narrower form, more parallel abdomen, shorter antennæ, with more transverse two basal joints of the club, and in several other features.

The two following species are allied more closely to the European *pusillima* Grav.:

Oligota parallela n. sp.—Rather stout, parallel, shining, deep black throughout, the abdomen pallescent at apex, the legs pale; punctures anteriorly very minute, not close, coarsely but not strongly imbricate on the elytra, the abdomen imbricate as usual; pubescence long and rather coarse but sparse and decumbent, palish; head rather large, fully two-thirds as wide as the prothorax, the antennæ unusually short and thick, black, piceous basally, barely one-half longer than the head, the third joint but little longer than wide, the club somewhat gradual in formation, the seventh joint larger than usual, transverse, the first two joints of the club strongly transverse; prothorax fully twice as wide as long, notably convex, the sides only very feebly convergent and broadly arcuate from base to apex; elytra subparallel, rather transverse, equal in width to the prothorax, the suture about a third longer; abdomen equal in width to the elytra, parallel, only just visibly narrowing at the apex, the sides very feebly arcuate. Length 0.8 mm.; width 0.28 mm. New York (Willets Point, Long Island).

Very distinct from *pusillima* and the following species in its stouter form and more developed elytra, but the general parallel linear outline is the same.

Oligota linearis n. sp.—Rather slender, parallel, convex, black, the abdomen pallescent at apex, the legs piceous; punctures very minute, nearly simple, rather close-set, the elytral sculpture imbricate; pubescence rather short, decumbent and finer than usual, only slightly pale, inconspicuous though not very sparse; head fully two-thirds as wide as the prothorax, the antennæ blackish, moderately short, of the usual form, the funicle very slender, the third joint nearly twice as long as wide, seventh transverse though less than twice as thick as the third, three-fifths as wide as the eighth, the club stout, abruptly formed, its two basal joints increasing, both strongly transverse, the last obtusely ovoidal,

as long as the two preceding; prothorax fully twice as wide as long, the sides very moderately converging though strongly arcuate from base to apex; elytra parallel, transverse, exactly equal in width to the prothorax, the sides straight, the suture fully a fourth longer than the pronotum and much shorter than the elytral flanks; abdomen fully as wide as the elytra, parallel, narrowing very slightly at apex, very much longer than the anterior parts taken together. Length 0.85 mm.; width 0.26 mm. New York (near the city).

This species is allied rather closely to *pusillima* but differs decisively in its much more close-set punctures and vestiture of the pronotum, in its less abbreviated elytra, in the very much stouter antennal club and more transverse penultimate joints of the antennæ.

Subfamily MYLLÆNINÆ.

We have in this subfamily a closer approach to the Tachyporinæ than occurs anywhere within the limits of the Aleocharinæ, not only in the limuloid form of the body but in the type of sexual characters. The body is almost invariably finely, very densely punctulate and pubescent. The three genera of the Myllæninæ differ among themselves in tarsal structure even more profoundly than do the three principal tribes of the Aleocharinæ and each should form the type of a distinct tribe. In *Gymnusa*, the only genus of the Gymnusini, the tarsi are long and well developed, with the basal joint of the posterior greatly elongated; in *Deinopsis*, however, they are very short and slender, with the basal joint of the posterior not at all elongated.

Tribe GYMNUSINI.

Gymnusa Grav.

The body in *Gymnusa* is larger than in either *Deinopsis* or *Myllæna* and the tarsi are 5-jointed throughout. The following species or subspecies has been hitherto confounded with the European *brevicollis:*

Gymnusa atra n. sp.—Greatly resembles *brevicollis* Payk., but smaller and sensibly narrower, similar in its deep black coloration, slender antennæ and rufous tarsi, the head relatively a little larger, the prothorax slightly less transverse, with the rounded sides somewhat less converging anteriorly; elytra and abdomen nearly similar; antennæ of the male with the joints rather less elongate, the female antennæ also having the joints shorter throughout but similarly though rather less strongly incrassate distally. Length 3.6–4.0 mm.; width 1.3–1.38 mm. Massachusetts (Cambridge) and Canada (Ottawa).

The differences are easily noted in series and there may be some appreciable sexual differences, but the abdominal apex is greatly retracted in all my specimens and the sexual modifications are comparatively slight in *Gymnusa*.

Tribe DEINOPSINI.

Deinopsis Matth.

In size of the body *Deinopsis* is intermediate between *Gymnusa* and *Myllæna* and the stature is notably uniform among the various species. The sexual characters are more conspicuous than in either of the other genera, the sixth tergite of the male having a very small narrow apical notch between the rounded apical lobes, that of the female being very deeply and acutely incised at apex. The tarsi are very different, being small and slender, proportionally smaller in fact than in any other genus of either this subfamily or of the Aleocharinæ that can now be called to mind, and they afford another exception in either of these subfamilies in being 3-jointed throughout. The species resemble each other a good deal superficially, as in the case of the other two genera of the Myllæninæ, but can be distinguished readily by differences in the male sexual characters. The abdomen is moderately tapering from the base in all except a species which I took at Vicksburg, Mississippi, in which it is strongly tapering as in most of the genus *Myllæna*, and I therefore surmise that this is the *myllænoides*, of Kraatz, described from Louisiana. *Americana* Kr., also described from Louisiana, seems to be represented in my collection by two examples taken in Virginia and is described below.

Deinopsis harringtoni n. sp.—Moderately stout, somewhat depressed, rather dull in lustre, the minute punctures close-set, asperate on the elytra, dark piceous-brown, blacker posteriorly, the very fine pubescence ashy; head convex, wider than long, laterally prominent at the eyes, two-thirds as wide as the prothorax, the antennæ palish, slender; prothorax short, almost twice as wide as long, the truncate apex three-fourths as wide as the base, which is broadly arcuate, becoming feebly sinuate laterally, the basal angles distinct, the sides rounded; elytra equal in width to the prothorax, the suture equal in length to the latter, parallel and feebly arcuate at the sides, the apex sinuate medially, each deeply sinuate laterally; abdomen nearly as wide as the elytra, the fifth tergite fully two-thirds as wide as the base, extremely minutely, densely punctulate and pubescent as usual. Length 2.65 mm.; width 0.9 mm. Canada (Ottawa),—W. H. Harrington.

The very deep and acutely incised notch of the sixth tergite in the female type is as usual, but the lobe at each side of the opening of the notch is very acutely angulate and not obtusely rounded, as it is in the European *erosa* and also in *americana*.

Deinopsis americana Kr.—Stouter, much more convex anteriorly, the pronotum very convex and strongly shining when denuded, dark piceous to black in color, the punctures and pubescence nearly as usual, the former very minute and feeble on the pronotum; head a little larger than in *harringtoni*, the prothorax similar in general outline but very much more convex and declivous anteriorly, not quite so transverse, elytra equal in width to the prothorax, longer than in *harringtoni*, the suture being evidently longer than the pronotum; abdomen nearly similar though somewhat more tapering, the fifth tergite not more than three-fifths as wide as the base. Length 2.6 mm.; width 0.95 mm. Virginia (Fredericksburg).

From *harringtoni* the two females of this species before me differ very much in the greater anterior convexity of the upper surface; also in having the angle at each side of the deep acute incisure of the sixth tergite obtusely rounded, as in the European *erosa*, but, in the latter, the sixth ventral plate is different, being very broadly trapezoidal at apex; here it is narrower, with the apex truncate.

Deinopsis rapida n. sp.—Form, lustre and sculpture very much as in the preceding but darker in color, black or nearly so, the vestiture palish; antennæ long and very slender; prothorax toward base fully as wide as the elytra or apparently somewhat wider, of the usual form, the hind angles slightly prominent posteriorly and right; elytra shorter than usual, the suture not quite so long as the pronotum; abdomen at base very nearly as wide as the elytra, unusually feebly narrowed from base to apex, the fifth tergite very large, almost as long as the two preceding and fully three-fourths as wide as the base. Length 2.8 mm.; width 0.98 mm. Iowa (Cedar Rapids),—Brendel.

The sixth tergite in the two male types is bilobed at tip, the median notch acute but much shallower than in the female and less abruptly limited at the sides than in the male of *erosa*, the lobes being more rounded. The sixth ventral plate is much more broadly truncate medially at apex than in the male of that species, where the median truncature is narrow and feebly sinuate.

In *Deinopsis* the remarkable even flat fringe of scale-like hairs at the apex of each ventral segment is as in *Gymnusa*, but there is no vestige of this singular character in *Myllæna*.

Tribe MYLLÆNINI.

Myllæna Erichs.

The sexual characters in this genus are much feebler than in *Deinopsis*, the sixth ventral plate being simply a little more truncate in the female than in the male as a rule, the sixth tergite angulate in both sexes. It differs primarily from the two other genera of the subfamily in the tarsal structure, the joints being 4–4–5 in number, with the first joint of the posterior elongate though not as much so as in *Gymnusa*. The species are numerous and are somewhat local, no two being common to the two sides of the continent so far as can be observed; this therefore makes a convenient division for purposes of description. The species described by Kraatz, from Louisiana, under the name *fuscipennis* is unknown to me; it has been identified with the European *minuta* Grav., but in all probability erroneously. None of the three European species now before me—*gracilis*, *brevicornis* and *græca*,—can be recognized among my American material. The two species *fenyesi* and *vulpina*, of Bernhauer, are not represented in my collection apparently.

Myllæna insomnis n. sp.—Rather stout, convex, dull in lustre, black, the fine dense decumbent hairs palish, the legs pale brown; punctures very fine and dense throughout; head small, convex; antennæ (♂) long, very slender, blackish, the basal joint stouter, pale and not twice as long as wide, the second very long, slender, much longer than the third, the outer joints not incrassate, all much longer than wide, the last one-half longer than the tenth, the antennæ shorter and more incrassate distally in the female; prothorax more than twice as wide as the head, barely one-half wider than long, the sides very evenly and moderately arcuate and converging from base to apex, the base broadly arcuate, sinuate laterally, the basal angles slightly prominent posteriorly and right; elytra parallel, equal in width to the prothorax and but little shorter, the lateral sinuses at apex unusually feeble; abdomen at base slightly narrower than the elytra, very strongly tapering, the fifth tergite barely one-half as wide as the base, the sixth with the apical angulation very acute and fully as long as its basal width (♂). Length 2.3 mm.; width 0.7 mm. Massachusetts,—Blanchard.

Distinguishable readily by the well developed elytra, having the apical sinuses unusually feeble, by the dull lustre, very tapering abdomen and other characters as noted above.

Myllæna audax n. sp.—Similar in general outline and convexity but larger and a little stouter, paler brown in color, the pronotum slightly

clouded discally, the abdomen blackish; surface more shining than in *insomnis* but with dense short palish vestiture; head much larger, rather more than half as wide as the prothorax, the antennæ (♂) long, slender and filiform, palish, the basal joint still paler, not as stout as in the preceding, twice as long as wide, the second relatively not quite so elongate as in that species though much longer than the third, the outer joints all much elongated; prothorax one-half wider than long, much less narrowed apically than in *insomnis*, the sides evenly but not strongly arcuate, the lateral basal sinuses deeper, the angles more abruptly prominent posteriorly, right; elytra shorter, parallel, equal in width to the prothorax but not quite four-fifths as long, the lateral sinuses at apex wider and deep; abdomen strongly, conically tapering, the fifth tergite rather less than half as wide as the base, the sixth with the apical angulate projection short, not as long as its basal width, the angle almost right. Length 2.55 mm.; width 0.83 mm. New York (near the city).

Readily separable from *insomnis* by its paler and more shining surface, shorter elytra, with deep lateral sinuses, and by several other distinctive features.

Myllæna abdita n. sp.—Smaller, though stout and convex, rather dull, the dense vestiture but slightly pale, the legs piceous to paler brown; head half as wide as the prothorax; antennæ (♂) long and very slender, filiform, black, the basal joint not or scarcely paler, the first three somewhat as in *insomnis*, the outer joints much elongated, the tenth fully two-thirds longer than wide; prothorax a little less than one-half wider than long, much narrowed apically but with the strongly arcuate sides more parallel and arcuate basally than in *insomnis*, or apparently widest before the base, the latter more transverse, the angles posteriorly flexed and distinct; elytra scarcely as wide as the prothorax and notably shorter, the suture about four-fifths as long, the outer sinuses at apex distinct and rather deep; abdomen less strongly tapering than in the two preceding, the fifth tergite evidently more than half as wide as the base, the angulation of the sixth (♂) fully twice as wide as long, with the angle not very sharp and rather more than right. Length 2.0 mm.; width 0.65 mm. New Jersey (Elizabeth).

This species can be known from either of the preceding by its smaller size, less tapering abdomen and much shorter and broader angulate apex of the sixth tergite in the male.

Myllæna insipiens n. sp.—Stout, only moderately convex, pale yellowish-brown in color throughout, dull, the extremely minute punctures and very short pale vestiture both unusually dense; head well developed, three-fifths as wide as the prothorax, the pale antennæ (♂) moderately long, gradually and feebly incrassate distally, the first three joints proportioned as usual, the tenth not quite one-half longer than wide, the eleventh almost as long as the two preceding; prothorax short, about three-fifths wider than long, only moderately narrowed at apex, the sides

broadly rounded, the base broadly arcuate, with the lateral sinuses almost obsolete, the angles not projecting posteriorly and decidedly obtuse; elytra as wide as the prothorax and very little shorter, strongly transverse, the lateral sinuses at apex distinct; abdomen moderately tapering, the fifth tergite three-fifths as wide as the base, the sixth (♂) very broadly and obtusely angulate at apex. Length 1.8 mm.; width 0.6 mm. Pennsylvania (near Philadelphia).

A very distinct species in its pale color, very dense and remarkably short pale vestiture and in the conformation of the thoracic base. The basal joint of the antennæ is very convex on its lower surface basally, and is attached by the upper angle of the base—apparently as usual in this genus.

Myllæna obscurata n. sp.—Rather small but stout, moderately convex, somewhat shining, piceous, the abdomen blackish, pale at apex; minute punctures and the moderately short palish vestiture less dense than usual; head unusually large, nearly two-thirds as wide as the prothorax, the antennæ (♀) not very slender, distinctly incrassate distally, the joints eight to ten slightly longer than wide; prothorax short, nearly three-fifths wider than long, only moderately narrowed at apex, widest behind the middle, the sides broadly, subevenly rounded, the base broadly, evenly and moderately arcuate from side to side, without trace of lateral sinuations, the basal angles obtuse and rather broadly rounded; elytra subparallel, with feebly arcuate sides, fully as wide as the prothorax and scarcely visibly shorter, the lateral sinuses at apex distinct and rather deep; abdomen at base not quite as wide as the elytra, much less conical than usual, the sides feebly arcuate, moderately tapering, the fifth tergite three-fifths as wide as the base. Length 1.75 mm.; width 0.6 mm. New Jersey (Atlantic City).

The single female type represents a very peculiar species in its large head, evenly arcuate thoracic base, with rounded basal angles, and in the somewhat arcuate sides of the abdomen.

Myllæna procidua n. sp.—Slender, only moderately convex, dull piceous-brown, the elytra gradually pale apically, the abdomen blackish, slightly palish apically, the very minute punctures and excessively minute palish hairs both extremely dense even on the head, as in *insipiens;* head three-fifths as wide as the prothorax; antennæ (♂) very slender and filiform, the basal joints as usual, the tenth more than one-half longer than wide; prothorax rather more than one-half wider than long, but little narrowed anteriorly, with broadly arcuate sides, the base notably arcuate, becoming scarcely visibly sinuate laterally, the basal angles slightly more than right but distinct; elytra rather long, parallel, with nearly straight sides, equal in width to the prothorax, the suture distinctly longer than the latter, the apical sinuses deep; abdomen slender, at base notably narrower than the elytra, very gradually tapering or conical and with straight sides, the fifth tergite but little longer than the

fourth, fully three-fifths as wide as the base, the sixth very broadly, obtusely angulate at tip. Length 2.0 mm.; width 0.55 mm. New York (Catskill Mts.).

This species, as represented by the single male type, is related closely to *insipiens*, but differs in its more slender form, darker color, longer elytra and notably more slender and filiform antennæ.

Myllæna arcana n. sp.—Small, moderately stout, convex, dull in lustre, the minute punctures very close-set and evidently asperulate, except on the abdomen where they are fine, feeble and less dense than usual, with rather longer vestiture than in many other species, the pubescence elsewhere dense, short and only slightly palish; color piceous, the elytra and abdominal tip slightly paler; head half as wide as the prothorax, the antennæ (♂) rather slender, moderate in length, filiform, the tenth joint one-half longer than wide; prothorax somewhat more than one-half wider than long, widest behind the middle, moderately narrowed anteriorly, the sides broadly rounded, somewhat less so apically, the base feebly arcuate, only just visibly sinuate laterally, the angles very slightly projecting posteriorly but obtuse and distinctly rounded; elytra as wide as the base, but not quite so wide as the widest part, of the prothorax, the suture very slightly shorter than the latter, the apical sinuses distinct; abdomen at base about as wide as the elytral apex, less conical than usual and only very moderately tapering, the fifth tergite broad, nearly three-fourths as wide as the base, the angulation of the sixth (♂) rather obtuse and more than right; side margins somewhat thin. Length 1.4–1.6 mm.; width 0.45 mm. Iowa (Cedar Rapids),—Brendel.

Recognizable by its small size, form of the thoracic base and angles and form and sculpture of the abdomen.

Myllæna ludificans n. sp.—Rather slender but convex, piceous-black, the elytra but little paler, the abdomen pale at the extreme tip, the legs pale; punctures minute and very dense, the lustre dull, the abdomen more shining, the vestiture short and close, with an admixture of slightly longer and more erect hairs; head nearly three-fifths as wide as the prothorax, the antennæ blackish, slightly pale basally, short and rather stout, evidently incrassate distally, the tenth joint slightly wider than long, the last three-fourths longer than wide, conically pointed in less than apical half; prothorax less transverse than usual, less than one-half wider than long, widest at or near the base, moderately narrowed anteriorly, the sides broadly, subevenly arcuate, the base feebly arcuate, not sinuate laterally, the angles slightly more than right, somewhat blunt and not projecting posteriorly; elytra as wide as the prothorax, moderately short, the suture fully three-fourths as long as the pronotum, the apical sinuses deep; abdomen slender, the base somewhat narrower than the elytra, evenly conical and gradually tapering, the fifth tergite slightly longer than the fourth and about three-fifths as wide as the first, the sixth obtusely angulate at tip, the margins rather fine. Length 1.6 mm.; width 0.4 mm. Rhode Island (Boston Neck).

The type seems to be a male, notwithstanding the unusually short and distinctly incrassate antennæ. From the European *brevicornis* it differs in its more slender form, less abbreviated elytra, relatively shorter fifth tergite and darker coloration.

Myllæna brevivestis n. sp.—Still smaller and more slender, similarly convex, paler brown in color, the head and abdomen blackish, the latter slightly pale at apex; integuments feebly shining, minutely, very closely punctulate and with the palish vestiture composed of extremely small fine decumbent hairs throughout; head nearly as in the preceding, the antennæ even somewhat shorter, stouter and more distally incrassate, but with the last joint longer, the tenth distinctly wider than long; prothorax similar throughout but shorter and more transverse; elytra much more abbreviated, strongly transverse, the suture barely two-thirds as long as the shorter prothorax, the apical sinuses distinct; abdomen similarly narrower than the elytra and moderately tapering, the segments two to five gradually increasing in length, the fifth rather abruptly narrower than the fourth, nearly two-thirds as wide as the base. Length 1.28 mm.; width 0.31 mm. Rhode Island (Boston Neck).

I at first considered the two specimens of this species as females of the preceding male, but on closer observation it proves by no means certain that they are females, as the sixth tergite is almost similarly obtusely angulate and the sixth ventral plate rather strongly rounded. That they represent a distinct species, however, is certain when we view the very different vestiture of extremely small, even and decumbent hairs, as well as the shorter prothorax, much more abbreviated elytra, paler coloration and the very much smaller size.

Myllæna immunda n. sp.—Minute, more parallel than usual, moderately convex, piceous-black throughout, somewhat dull, the minute punctures close, asperulate on the elytra and toward the pronotal base, very minute and sparser on the more shining abdomen, the vestiture rather coarse, dark in color, moderately short, longer on the abdomen; head three-fifths as wide as the prothorax, the antennæ blackish, rather slender and almost filiform, moderately long, the tenth joint much longer than wide, the last slender, almost as long as the two preceding; prothorax greatly developed, widest behind the middle, more than one-half wider than long, much wider than any part of the elytra, only moderately narrowed toward apex, the latter broadly truncate, the sides rounded, the base feebly arcuate, very slightly sinuate laterally, the angles obtuse, distinct though only slightly prominent posteriorly; elytra very short, the suture only three-fifths as long as the prothorax, the apical sinuses rather shallow; abdomen at base about as wide as the elytra, only moderately tapering, the fifth tergite nearly three-fourths as wide as the base, the margins rather thin. Length 1.2–1.5 mm.; width 0.35–0.42 mm. Canada (Ottawa),—W. H. Harrington.

One of the most remarkable of our species in its large prothorax, very short elytra, feebly tapering abdomen, small size and other features as stated.

Myllæna decreta n. sp.—Small, stout, convex, strongly attenuate behind, brown in color, the abdomen blackish, pale at apex; surface slightly shining, the minute punctures only moderately dense and the short palish hairs well separated; head three-fifths as wide as the prothorax, the antennæ (♂) pale, notably short, rather stout, distinctly and rather strongly incrassate distally, the tenth joint about as long as wide; prothorax large, one-half wider than long, rather strongly narrowed apically, widest near the base, the sides rounded, the base feebly arcuate, becoming slightly sinuate laterally, the angles obtuse and somewhat blunt; elytra slightly narrower than the widest part of the prothorax, short, the suture less than two-thirds as long as the pronotum, the sinuses at apex moderately deep; abdomen at base almost as wide as the elytra, rapidly and evenly conical, with thin margins, the fifth tergite slightly more than half as wide as the base, the sixth obtuse at tip, the sixth ventral (♂) narrowly and strongly rounded at tip. Length 1.3–1.6 mm.; width 0.36–0.52 mm. California (Truckee).

Recognizable by its incrassate antennæ, rapidly tapering abdomen, well developed prothorax and rather loose punctuation.

Myllæna impellens n. sp.—Small, rather convex and stout in form, slightly shining, the sculpture and vestiture nearly as in the preceding; color piceous-brown to paler, the abdomen blackish, paler at apex; head as in *decreta*, the short antennæ (♂) dark in color, only very moderately incrassate distally and with their vestiture composed of less close-set, coarser and more bristling hairs, the tenth joint about as long as wide; prothorax notably shorter, two-thirds wider than long, otherwise nearly similar, the lustre more shining; elytra short, fully as wide as any part of the prothorax, the suture about two-thirds as long as the latter, the apical sinuses well developed; abdomen at base nearly as wide as the elytra, rapidly tapering, with thin margins, the fifth tergite but little more than half as wide as the base, the sixth rather narrowly angularly produced but with the angle blunt, the sixth ventral (♂) strongly rounded, with the short apical series of minute serrules distinct. Length 1.2–1.75 mm.; width 0.34–0.6 mm. California (Hoopa Valley, Humboldt Co.).

Well distinguished from the last by its shorter prothorax, less incrassate antennæ and still more shining surface lustre. It seems to vary in size even to a greater degree than usual.

Myllæna brevicollis n. sp.—Nearly similar in form and convexity to the preceding but less shining, dullish because of the rather dense punctures, the vestiture moderately short, palish, the coloration nearly similar; head almost three-fifths as wide as the prothorax, the antennæ dark brown, short, distinctly incrassate, the tenth joint not quite so

long as wide; prothorax short, slightly widest behind the middle, not wider than the elytra, moderately narrowed anteriorly, the sides rather strongly arcuate, the basal angles slightly obtuse but distinct and slightly flexed posteriorly; elytra short though relatively longer than in *impellens*, the suture four-fifths as long as the prothorax, the apical sinuses distinct; abdomen rather slender, at base distinctly narrower than the elytra, rather rapidly and evenly tapering though less strongly so than in the preceding, the fifth tergite nearly two-thirds as wide as the base, the sixth dorsal and ventral plates obtusely rounded in the type, the ventral with minute serrules at tip. Length 1.4 mm.; width 0.42 mm. California (Paraiso Hot Springs, Monterey Co.).

This species is rather closely allied to *impellens* but has the elytra relatively less abbreviated and the abdomen less tapering.

Myllæna frivola n. sp.—Somewhat slender and only moderately convex, piceous-black throughout, the legs paler; surface feebly shining, the elytra opaque, the vestiture dark, moderately short, dense, the minute imbricate sculpture of the abdomen distinct to the apex; head relatively large, nearly two-thirds as wide as the prothorax, the antennæ (♂) piceous, paler basally, rather long though feebly incrassate distally, the tenth joint slightly longer than wide; prothorax rather short, three-fifths wider than long, unusually slightly narrowed at apex, the sides parallel and feebly arcuate, rounding anteriorly, equal in width to the elytra, the basal angles slightly obtuse, feebly prominent posteriorly; elytra equal in length to the prothorax, the apical sinuses distinct; abdomen rather slender, at base not as wide as the elytra, gradually and evenly tapering, the fifth tergite nearly three-fifths as wide as the base, the sixth ventral plate circularly rounded and with a loose fringe of short stiff setæ at apex. Length (extended) 1.75–1.85 mm.; width 0.45–0.5 mm. Nevada (Elko),—Wickham.

Distinct in its feebly convex form, dark coloration, equal length of the prothorax and elytra and in antennal structure.

Myllæna esuriens n. sp.—Rather slender and very moderately convex, dull, the minute punctures everywhere very dense, the imbriform reticulation of the abdomen minute and very close, with the hairs very fine and close and evenly, longitudinally decumbent; color piceous-black throughout, the legs pale; head nearly three-fifths as wide as the prothorax, the antennæ (♂) dark, paler basally, not very slender, feebly incrassate distally, the tenth joint a fourth longer than wide; prothorax well developed though strongly transverse, fully three-fifths wider than long, slightly widest a little before the base, where the sides are moderately rounded, thence not very strongly convergent and straighter to the apex, the base rather strongly, evenly arcuate, not appreciably sinuate laterally, the basal angles distinct but obtuse; elytra at base a little narrower, at apex equal in width to, the prothorax, the suture equal in length to the latter or even somewhat longer, the apical sinuses large and deep; abdomen evenly tapering, at base not quite so wide as the

elytra, the fifth tergite fully three-fifths as wide as the base. Length 2.1 mm.; width 0.55 mm. California (coast region from Humboldt to Los Angeles).

Differs from *frivola* in its slightly larger size, duller lustre and much denser sculpture, especially of the abdomen. It is one of the most abundant and better defined of the Pacific coast species.

Myllæna vegeta n. sp.—Very stout and convex, blackish-piceous, the abdomen scarcely paler apically, dull, the palish vestiture very dense and rather shaggy, composed of minute decumbent and longer suberect hairs; head about half as wide as the prothorax, the antennæ (♂) dark, pale at base and apically, slender, rather long and almost filiform, the tenth joint one-half longer than wide; prothorax large, one-half wider than long, much narrowed at apex, very convex, widest at base, the sides evenly and rather strongly rounded, the base transverse, only very feebly arcuate, broadly sinuate laterally, the angles scarcely more than right, distinct and evidently though not strongly projecting posteriorly; elytra much shorter and not quite so wide as the prothorax, the suture but little more than two-thirds as long as the latter, the apical sinuses large and deep; abdomen not quite so wide as the elytral apex, moderately though evenly tapering, the fifth tergite evidently more than half as wide as the base, the margins not very thin. Length (contracted) 1.7 mm.; width 0.72 mm. California (Pomona, Los Angeles Co.),—Fall.

Recognizable without difficulty by its stout and very convex, limuloid form, slender antennæ and rather short elytra.

Myllæna umbra n. sp —Stout, convex and limuliform, black or piceous-black throughout, the abdomen not paler at tip as a rule, slightly shining, the dark vestiture moderately short and subeven; head rather small, about half as wide as the prothorax, the antennæ (♂) moderate in length, rather stout though only feebly incrassulate, brown in color, the tenth joint somewhat obconic, a fifth longer than wide; prothorax three-fifths wider than long, widest at base and equal in width to the elytra, much narrowed at apex, the sides strongly rounded, the base broadly arcuate, becoming faintly sinuate laterally, the angles slightly prominent posteriorly but obtuse and unusually rounded; elytra very well developed, parallel, the suture about a fifth longer than the prothorax, the apical sinuses deep and well developed; abdomen at base nearly as wide as the elytra, evenly and very strongly tapering, with straight sides and rather thin margins, the fifth tergite less than half as wide as the base. Length 1.72–2.1 mm.; width 0.65–0.7 mm. California (coast regions from Humboldt to Los Angeles Co., and also at Lake Tahoe).

To be known readily by the stout body, with very acutely tapering abdomen and well developed elytra. It is even more widely distributed than *esuriens* and is fully as abundant.

Myllæna scobinella n. sp.—Form and convexity as in the preceding, piceous-black throughout, the abdomen pale at tip, the legs pale; lustre rather shining, the minute punctures not very dense, distinctly asperate on the elytra, the pubescence not very pale and scarcely concealing the surface, moderately short; head half as wide as the prothorax, the antennæ missing in the type; prothorax as in *umbra* throughout; elytra shorter, parallel, equal in width to the prothorax, the suture three-fourths as long as the latter, the apical sinuses small and very feeble, much less distinct than usual; abdomen at base not quite as wide as the elytra, evenly and moderately tapering, with straight sides and thin margins, the fifth tergite three-fifths as wide as the base, as long as the two preceding combined. Length 1.62 mm.; width 0.63 mm. British Columbia (Metlakatla),—J. H. Keen.

Readily distinguishable from *umbra*, which alone it resembles in any way, by its much shorter elytra, with the apical sinuses unusually small and feeble; also by its less strongly tapering and less acute abdomen.

Myllæna molesta n. sp.—Large, stout, convex, piceous-black, paler at the tip of the abdomen, rather dull in lustre, the minute palish decumbent hairs dense throughout, mingled, except on the abdomen, with more erect and sparser hairs; head half as wide as the prothorax, the antennæ (♂) long, slender, very feebly incrassate, dark brown, the last joint paler, long and slender and nearly as long as the two preceding, the tenth more than one-half longer than wide, feebly obconical; prothorax fully one-half wider than long, generally paler apically and basally, the sides parallel, broadly rounding and converging from near the base to the much narrowed apex, the base very feebly arcuate, the angles feebly prominent posteriorly and distinct; elytra well developed, fully as wide as the prothorax, parallel, the suture very slightly shorter than the pronotum, the apical sinuses large and deep; abdomen at base narrower than the elytra, rapidly and evenly tapering, the fifth tergite about half as wide as the first, the sixth (♂) angulate, the sixth ventral plate prominently parabolic at tip. Length 2.35 mm.; width 0.8 mm. California (coast regions north of San Francisco).

Very distinct from any of the preceding species in its larger size, slender and longer antennæ, coloration and other characters.

Myllæna dissimulans n. sp.—Form and coloration nearly as in *molesta* but not so stout and with the fine, dense and palish decumbent hairs not mingled with longer erect hairs; head larger, somewhat more than half as wide as the prothorax, the antennæ relatively not quite so long, dark though as usual pale at apex and basally, rather more evidently incrassate distally, the tenth joint obconic, scarcely one-half longer than wide, the eleventh much shorter than the two preceding; prothorax similar in form, the elytra also similar, except that the suture is nearly as long as the pronotum; abdomen narrower and rather more rapidly

tapering, the sixth ventral plate (♂) evenly and circularly rounding. Length 2.4 mm.; width 0.73 mm. California (Lake Tahoe).

This form is very much like *molesta* in facies and structure and may prove to be a simple variety; the antennæ, however, are thicker and not so long; the vestiture is more even and the body not quite so stout.

II—NOTES ON THE COCCINELLIDAE WITH SOME GENERAL REMARKS AND SYNONYMY.

COCCINELLIDÆ.

Exochomus Redt.

Because of misidentifying a species described by Weise, now known under the name *Exochomus septentrionis*, I have done Mr. Leng an injustice (Can. Ent., XL, p. 412) which I desire to rectify. Mr. Leng informs me that he has corresponded with Dr. Weise on the subject and that the latter made known to him certain facts concerning the true *septentrionis*, which materially alter the conceptions formerly entertained. It seems that the true *septentrionis* is from a more western part of the Hudson Bay regions, that it is very feebly punctured and has the elytral maculation reduced to a narrow sutural vitta, expanded at the apical margin, and two small isolated discal spots on each elytron. Through the kindness of Mr. Leng I have received examples of *davisi* Leng, *septentrionis* Weise, as taken by Mr. Norman Criddle at Aweme, Manitoba, and a specimen of *högei* Gorh., taken at Pueblo, Colorado. There is no question in my mind now, that we have three allied but perfectly distinct species of this particular group of *Exochomus*.

The five examples of *davisi* sent by Mr. Leng are mutually homogeneous and similar in every way to the single specimen already in my cabinet, which I mistook for *septentrionis*. It differs from both *septentrionis* and *högei* in the constantly more developed black maculation, the anterior spots being united occasionally with the much broadened sutural vitta, but, especially and specifically, in the notably coarse deep punctures of the elytra, there being no material variation in this character.

The example of *högei*, from Pueblo, represents probably almost the extreme northern extension of this Sonoran species and is wholly similar to the El Paso specimens in my collection. On comparing it with the Manitoban *septentrionis*, certain important differences are at once apparent, the most manifest of which pertains to the position of the small circular spots of the elytra. In *septentrionis*

the posterior spots are distinctly nearer the lateral edge than they are to the suture and in similar degree to the anterior spots, so that from a dorsal point of view the four spots form a square. In *högei* the posterior spots are equidistant from the suture and lateral edges, while the anterior spots are nearly as in *septentrionis*, much nearer the lateral edges than the suture, so that, viewed in the same way, the four spots form an inverted trapezoid; this difference is accentuated by reason of the fact that the body in *högei* is more broadly oval than in *septentrionis*.

There is surprisingly little intra-specific variability of the maculation in *Exochomus*, as well as many other genera of Coccinellidæ, although some genera, such as *Hippodamia* and to a less degree *Coccinella*, are characterized by much more evident inconstancy in the ornamentation. The same criteria of inconstancy cannot be applied to all the genera of the family, some are constant and some inconstant.

A few months after the above was written, identically as printed, there appeared an article by Mr. Leng (Journ. N. Y. Ent. Soc., 1911, p. 6) on variable maculation in the Coccinellidæ, in which the author labors under several evident misconceptions.

The language on page 7: "Otherwise its attitude appears to be not very different from that of his former work on Coccinellidæ, published in 1899, in which he did not hesitate to adopt 'type of coloration as a primary taxonomic character,' " for example, taken in connection with the substance of the succeeding paragraph, where he alludes to the occasional presence of a basal spot in *Hippodamia glacialis*, when I had stated that it is invariably absent, as overthrowing my theory of the importance of type of ornamentation, proves conclusively that he has merely misapprehended the meaning of my expression "*type* of ornamentation." This phrase does not refer at all to the diversification of color pattern by reason of reduction or expansion, but to marked differences in the *scheme* of ornamentation. Excepting *arizonicus*, which Mr. Leng correctly assigned to a different genus or subgenus, all of our species of *Exochomus*, for instance, have a similar type of ornamentation when considered in a broad sense of that term, consisting, in its normal form, of a sutural stripe and two spots of black on each

elytron. When these spots and the vitta are greatly reduced we have forms like *högei*, when more expanded forms like *septentrionis*, *marginipennis* and *californicus*, and when most developed entirely black forms, such as *æthiops* and *mormonicus;* or, when some one or two of the normal features disappear, we have exceptional but not non-typical forms of ornamentation as observable in *deflectens*, *childreni* and others.

Now if Mr. Leng will examine the related European *Brumus 8-signatus*, he will perceive at once what I mean by type of ornamentation; for the spots of *8-signatus* are in such number, and especially in such position, that by no conceivable variation could they ever assume any such form as in our representatives of *Exochomus*. So again, if Mr. Leng will examine the pronotum of the true *Coccinella* as typified by *9-notata*, for example, and compare it with the pronotum of *Olla* or *Adalia*, he will again find a difference which is that of *type* in the sense which I desired to convey by that term. All our *Hippodamiæ* have a common type of ornamentation, excepting the *spuria* and *parenthesis* groups and *15-maculata*, which have more or less different types of maculation. *15-maculata*, abundant near St. Louis, having the post-scutellar spot expanded transversely, sometimes simple and sometimes resolved into two spots but never, so far at least as evinced by my series, exhibiting the slightest tendency to unite with the scutellar dash—a character so generally prevalent,—possesses for those reasons a rather different type of maculation from any of the allies of *divergens*, showing that it is an isolated species.

A good many genera as we conceive them now are composite and include diverse elements, some of which do not adhere to the type of ornamentation characterizing the majority of the species; but this only means that these various types indicate very well-marked groups or subgenera of the genus, which we deem it better not to define as subgenera because of the interminable nature of the subject. In *Hyperaspis*, for instance, a type of maculation appears as in *levrati* and *metator*, which is deceptively similar to that prevailing in a large group of *Brachyacantha;* and many other examples could be cited, such as the European *Exochomus 4-pustulatus*, the Cuban *E. venustulus* or the South African *E. versutus*, when compared with our own forms of the genus; some of them are evidently subgenerically different.

On page 8, Mr. Leng states that my adoption of type of coloration as a primary taxonomic character, led me—through an assumed paucity of material—into many "confessed errors," which must deprive my conclusions of full authority. Disregarding for the moment Mr. Leng's misapprehension of the term type of coloration or maculation, it is uncertain to me whether or not he means that by my having openly confessed error, my investigations are thereby deprived of authoritative weight. If this be the sense intended, we can say with sincere conviction that it is only those who are primarily interested in truth for its own sake, as the single goal for which we should aim in scientific study, who deem it essential to reverse their judgment publicly upon the appearance of the welcome light of additional evidence, more particularly in a field that none of us really understands or could more than partially comprehend in the longest human lifetime. Such occasional confessed reversals of judgment may damage one's reputation among a certain element, who do not care to take the trouble to weigh the evidence themselves, as evincing vacillation and consequent unreliability,—for to be held in high authority by the multitude in science as well as in politics, one must never admit anything that he may have said or done to be really wrong; but, among those wise enough or sufficiently experienced to appreciate how little we do really know, such a course should but increase their confidence.

Furthermore Mr. Leng may have no fear of belittling any modicum of value my works may possess; it is quite beyond his power to belittle the grains of truth, and I should be grateful to anyone who may discover and eliminate the chaff:—that is the real chaff, for, some being real and some opinionative, the latter may still be the subject of legitimate disputation.

And now a few words as to the recent work of Mr. Roswell H. Johnson, alluded to at some length by Mr. Leng. It must be remembered that this author has attacked the subject purely from the standpoint of the experimental biologist, dealing with variability of spots and dashes of ornamentation and leaving almost wholly out of consideration all those elements shown by experience to have intrinsic weight in systematic taxonomy, such as structural features both general and special, sexual characters, form, sculpture and many other available and important criteria in defining species,

so that his work can not be viewed seriously from the standpoint of classification. Outline is frequently of some value and yet all the published figures are alike in this respect, the same diagram being used for all, upon which to depict the dots and dashes. It is very easy for one viewing the subject chiefly in this light to be mistaken by forming series extending from unmarked to profusely marked individuals; for, having his attention fixed solely upon maculation, he is sure to overlook other more significant landmarks. I have had some experience throwing light upon the author's methods, which it seems desirable to record at the present opportunity.

Mr. Johnson prepared his material in the form of plaques made of two glass plates, separated by a piece of velvet upon which were closely placed in parallel lines, a large number of specimens of what he considered single species, arranged according to development of marking, in order to display the range of variation at a glance. One of these plaques, purporting to contain only specimens of *Hippodamia lecontei*, from Fairfield, Washington State, he very kindly presented to me; the diversity of ornamentation revealed within it was certainly amazing. The specimens were of course quite useless in that condition for purposes of study, and I therefore took the plaque apart and mounted in the regular way as many examples as remained uncrushed by the pressure of the glass plates.

After carefully studying these 112 specimens, so mounted, it became evident that they could readily be resolved into three clearly demarcated series of species or subspecies, one of which, represented by 35 specimens, was conspicuously homogeneous within itself, well isolated from the others and subject to comparatively little variation of any kind, even in size of body. This was the form named *caseyi* by Mr. Johnson; its spots are all relatively heavy and the basal spots of the elytra are frequently loosely joined transversely; but it is distinguished primarily from the other two by having the black area of the pronotum invariably attain, or virtually attain, the side margins at the middle, a condition never observable in the latter.

The second series of 47 specimens represented the northwest coast subspecies, formerly alluded to by the writer as having been confounded by Mr. Leng with *divergens;* the three scutellar spots are frequently united to form a triangular star, which never exhibits

the slightest tendency to spread laterally; but the posterior maculation of the elytra is notably variable, the two post-median spots very frequently being united transversely, differing in this way, as well as in the amalgamation of the three scutellar spots, from *divergens*, in which the tendency is not apparent, at any rate as shown by my extensive material from many regions.

The third series, consisting of 28 specimens, was also decidedly variable in markings but had, as one of its chief distinguishing features, an irregular transverse laterally attenuated basal fascia, sometimes wanting and frequently disintegrated, but always evincing a tendency to lateral extension in the amalgamated scutellar and post-scutellar spots, except rarely when the latter were wanting. It can be considered a variety of *extensa* Muls.

Both of the last two forms are somewhat larger in average size than the first and vary also very much in the development of the discal diverging lines of the pronotum, from wholly wanting—rather a rare condition, to very large and breaking through to the pale border—also an exceptional development.

Besides these three dominant forms, there were two uniques, one *uteana* Csy., and the other a slight variation of *5-signata* Kirby. There were no specimens that could be regarded as intermediates uniting the three series mentioned above, and all the crushed and rejected specimens were simple replicas of others and of no material importance.

To one inspecting these segregated series, which I have carefully preserved intact, while bearing in mind that they were indiscriminately mingled together in the plaque under the name *lecontei*, of which New Mexican species I could not find a specimen, the opinion becomes unavoidable that Mr. Johnson's conclusions are valueless from the taxonomic viewpoint, though only natural if we consider the special character of his investigation.

Synonymy and Corrections.

STAPHYLINIDÆ.

On p. 61 and 62 (Mem. Col., I), for *palliola* read *palleola*.
On page 51 (l. c.), 12th line from top, for *repleta* read *reperta*.
On page 83 (l. c.), 16th line from top, for **subfusca** read **suffusca**.
Atheta (*Stethusa*) *affluens* Csy. (Mem. Col., I, p. 5) may be considered a variety or perhaps less, of *irvingi* Csy. (l. c.).

Atheta (*Hilara*) *sejuncta* Csy. (l. c., p. 64) may be considered a synonym of *Atheta* (*Hilara*) *libens* Csy. (l. c., p. 63).

It is probable that *Rovalida* Csy. (l. c., p. 69) is a synonym of *Halobrecthina* Bernh. (Deut. Ent. Zeits., 1909, p. 519). The infra-lateral carinæ of the head are very feeble and incomplete and may very easily have been overlooked by Dr. Bernhauer.

Dimetrota (*Dalotia*) *crucialis* (Mem. Col., I, p. 107) is found by observation under better conditions to be a synonym of *pectorina* Csy. (l. c., p. 106).

Sableta (*Canastota*) *beatula* Csy. (l. c., p. 109) is a synonym of *Silusida nanella* Csy. (Tr. Acad. Sci. St. Louis, XVI, p. 271); the generic reference of the former and not the latter being correct.

Datomicra insolida Csy. (Mem. Col., I, p. 125) is a synonym of *Dimetrota sectator* Csy. (l. c., p. 102), the former generic reference probably being more nearly correct than the latter; the species properly belongs to neither genus in all probability.

Dolosota Csy. (l. c., p. 136) is a synonym of *Pancota* Csy. (Tr. Acad. St. Louis, XVI, p. 345), the systematic position of the former being correct as a member of the Myrmedoniini.

Microlia pernix Csy. (*Pancota* and not *Dolosota*),—Mem. Col., I, p. 144—is, without much doubt, the same as *Homalota silacea* Erichs. The very peculiar coloration of the antennæ seems to indicate this.

It is highly probable that *Hoplandria acudentata* Dury (Journ. Cin. Soc. Nat. Hist., XXI, p. 65),—the publication date on the cover appearing as September, 1910, but not distributed, according to notification from the Secretary, Mr. Chas. Dury, until Oct. 1st,—is the same as *Hoplandria læviventris* Csy. (Mem. Col., I, p. 176), the distribution of the latter work having begun on Sept. 23d and received by a number of institutions on Sept. 24th, 1910. My copy of the Cincinnati publication was not received until Oct. 10, 1910. The latter name therefore has priority by about a week. I greatly regret that there should have been any conflict, and if I had suspected that the species *læviventris*, described from four females, were the same as *acudentata*, described from the male, I would have withheld the former very properly as being founded upon the female only. Of course there is a chance that my surmise as to the specific identity of the two forms may not be correct, but the evidence upon careful comparison of the descriptions seems to indicate its strong probability. The male in this genus is often materially larger than the female.

Gnypeta oregona Csy. (Tr. Acad. St. Louis, XVI, p. 199) is a synonym of *Gnypeta helenæ* Csy. (l. c., p. 193).

Lissagria impressifrons Csy. (l. c., p. 254) may be regarded as a malformation of *Lissagria robusta* Csy. (l. c.). *Lissagria læviuscula* Lec., is now represented in my cabinet by a good series; it is the largest species of the genus and the measurements given by LeConte are not far from correct.

Oligurota Csy. (Ann. N. Y. Acad., VII, 1894, p. 361) must be united with *Thecturota* Csy. (l. c., p. 357) as no better, at the best, than a subgenus.

For other corrections see remarks under the tribe Bolitocharini in the preceding paper.

ELATERIDÆ.

The names *idoneus, abdominalis* and *arizonicus*, applied by the writer (Can. Ent., 1907, pp. 31, 32) to forms of *Chalcolepidius* allied to *snowi* Csy., are to be suppressed. Additional material shows that they are probably not even varietal in nature. *Snowi* is related to *webbi*, but is abundantly distinct and not to be confounded therewith.

Chalcolepidius acuminatus Csy. (l. c., p. 32) has the inner margin of the lateral white pronotal areas outwardly arcuate throughout its length and not almost straight, as it is in *apacheanus;* but the elytra are generally not materially more acuminate than in that species. It occurs also in northern Mexico. The allied *nobilis* Csy., seems to be confined to the Huachuca Mts., of southern Arizona.

Chalcolepidius sodalis Csy. (l. c., p. 33) may be united with *aztecus* as a slight variety.

BUPRESTIDÆ.

It is probable that *Buprestis virens* Csy. (Proc. Wash. Acad. Sci., XI, p. 105) is, rather than a subspecies of *rufipes*, simply the female of that species, though, if this be the case, the differences between the sexes of *rufipes* in size and form are not indicated in allied species of the genus.

Dicerca inflatula Csy. (l. c., p. 140) may be united with *abrupta* Csy. (l. c.).

TENEBRIONIDÆ.

Telabis proxima Csy. (Proc. Wash. Acad., IX, p. 315) may be united with *prominens* Csy. (l. c., p. 314); the prominent and somewhat everted apical angles of the prothorax in the latter are completely lost in the type of the former, but otherwise there is such an extreme likeness that there can be no doubt of the propriety of the course suggested.

Coniontis pectoralis and *picescens* Csy. (l. c., X, pp. 86, 87) may be regarded as subspecies of *levettei* Csy. (l. c., p. 87).

Coniontis inflexula Csy. (l. c., p. 107) may be united with *exigua* Csy. (l. c., p. 106); the character by which it was separated is rather striking in appearance but is adventitious without much doubt.

Coniontis verna Csy. (l. c., p. 94) must be removed from the *opaca* group and placed in the *abdominalis* group, of which it is the smallest member.

Additional Notes.

CICINDELIDÆ.

Cincindela exoleta Csy., is a synonym of *senilis* Horn, and not a subspecies.

C. boulderensis Csy., is simply a subspecies of *punctulata–micans*, having the foveæ of the subsutural line very feeble or subobsolete.

I have recently taken a specimen of *C. hentzi* Dej., on the Blue Ridge, near the southern boundary of Pennsylvania; it is mentioned by Mr. Leng as occurring only in Massachusetts.

C. arizonæ Wick., is not a subspecies of *rufiventris*, but is a distinct species, allied more closely to *hæmorrhagica* than to *rufiventris*.

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TENEBRIONIDÆ.

A short time ago I received from Mr. L. E. Ricksecker, a specimen of the very rare *Auchmobius sublævis*, of LeConte, taken at a point about 90 miles inland from San Diego, near Julian, and therefore in the vicinity of the type locality. A casual inspection shows that the description of the antennæ given by Dr. Horn is wholly erroneous, and that the Owen's Valley representative cited by that author is not only distinct, but represents a very different genus or more probably tribe. The antennæ in *sublævis* are rather slender and cylindric, enlarged very slightly in the last four joints as in the Eurymetoponini generally, and of virtually typical structure; the third joint is much elongated, being about as long as the next two combined. The anterior tibiæ are truncate at tip and not or barely at all everted externally. The epistoma is of a purely Eurymetoponid type but slightly exaggerated, being somewhat produced medially, with its tip rather deeply sinuate, but without the faintest suggestion of the lobate form occurring in *Trimytis*. In fact the only decisive peculiarity of *Auchmobius*, when compared for example with *Cryptadius*, resides in the absence of supra-orbital carinæ, and I am almost of opinion that it is none other than the true *Eurymetopon*, the elytral sulci mentioned as pertaining to the latter being sometimes faintly observable in the similarly non-striate elytra of *Cryptadius*. At any rate, *Auchmobius* belongs to the Eurymetoponini and there is no tribe Auchmobiini, the remarkable antennal characters published by Horn, which impelled the suggestion of such a tribe, being non-existent. The Owen's valley species, whatever it may be, mistaken by Dr. Horn for *Auchmobius sublævis*, does however probably represent a distinct tribe as above intimated; but of this I can say no more without an inspection of that interesting nondescript.

I have recently received a large female example of *Zopherodes elegans* Horn, taken at some point between Fort Wingate and Sta. Fé, New Mexico. It has nothing in common with *Zopherinus* as I formerly thought possible, but is a typical *Zopherodes* like all the others found in our western Sonoran regions. In *Zopherinus* the white incrustation generally covers the entire upper surface, excepting the elevations and a pronotal blotch, as for instance in *venosus* Chmp.; it may be confined, however, to the lateral margins only, as in *limbatus* Csy., or may be wanting altogether, as in *lævicollis*. In *Zopherodes*, however, it is wanting except very rarely and then appearing at the margins only, as in *elegans* Horn.

Zopherodes lugubris Csy., does not come from the Grand Cañon as supposed, but occurs in the more southern part of the state, recently having been collected near Tuçson.

Z. verrucipennis Csy., may be regarded as a synonym of *otiosus* and not a subspecies.

Anepsius catenulatus Csy., may be united with *atratus* Csy., as a synonym. *Atratus* resembles *delicatulus* Lec., very much, but is black and not piceous in color. The prothorax is less transverse and the elytra are shorter; the sculpture is rather stronger and closer throughout.

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Issued August 15, 1911.

MEMOIRS

ON THE

COLEOPTERA

BY

THOS. L. CASEY

II

1911

Published by
The New Era Printing Company
Lancaster, Pa.

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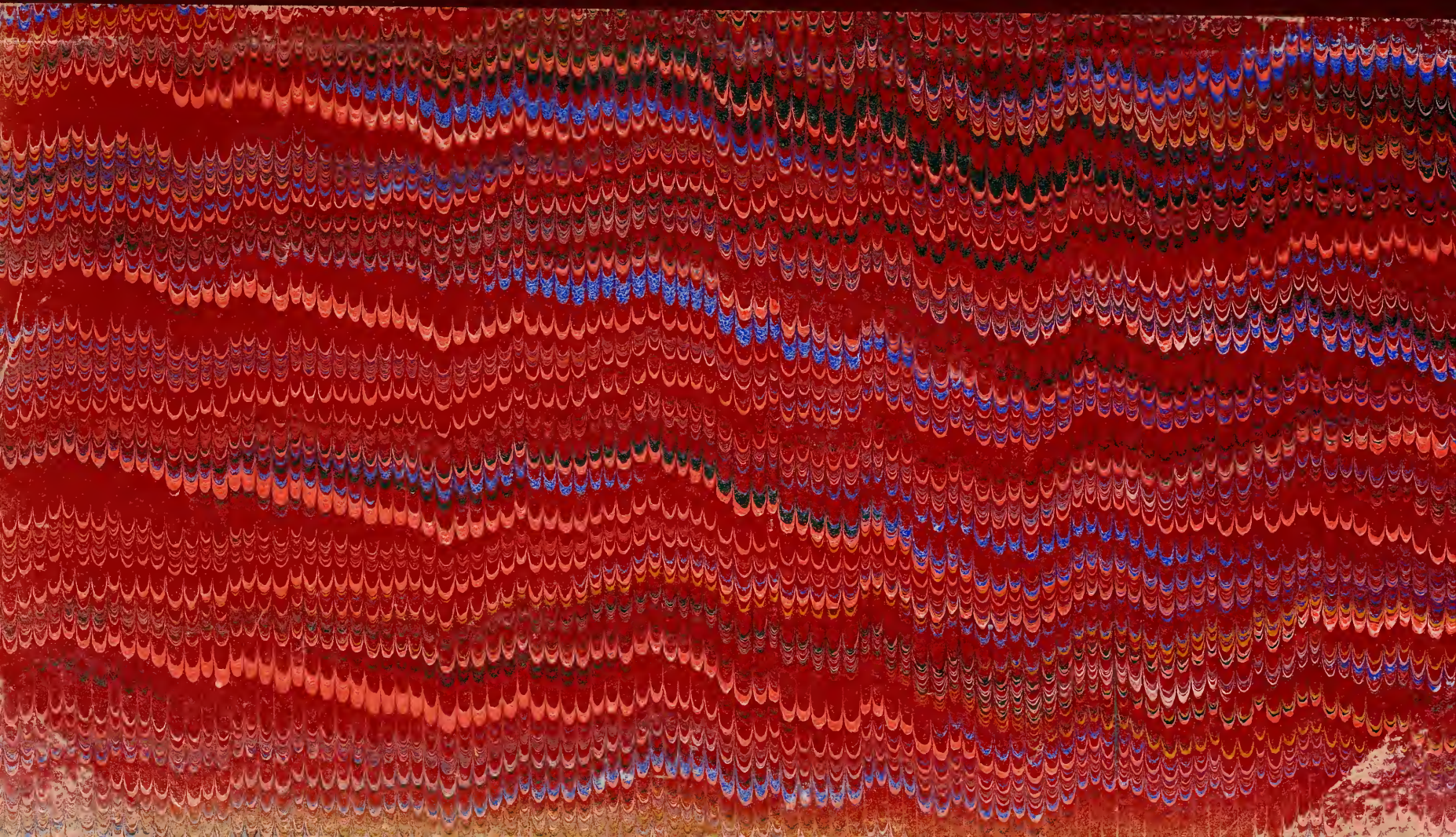
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